MAR 8 1946

THE AMERICAN

School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

In This Issue:

★ **Organization and Administration of Adult Education** — *Bruntz*

★ **Utah's Compulsory State-Wide Salary Schedules** — *Campbell*

★ **The School Board Member and Pressure Groups** — *Koenig*

★ **Attacking the Child Accident Problem** — *Danford*

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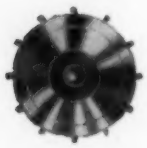

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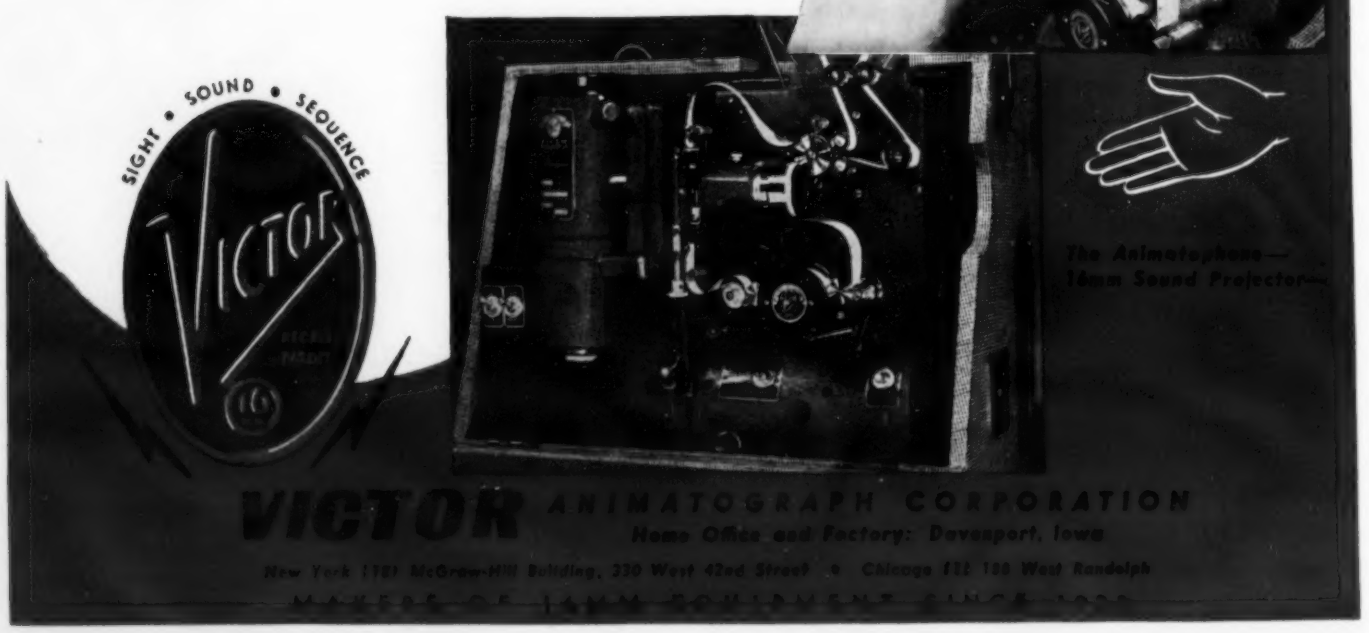

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The contents of this issue are listed in the "Education Index."

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Fifty-five years ago, in March, 1891, the first issue of the AMERICAN SCHOOL BOARD JOURNAL was published. Pioneering in public school administration, the history of the AMERICAN SCHOOL BOARD JOURNAL is a record of service and accomplishment. During these 55 years of publication, it has been prominently identified with every important development in the progress of our public school system. In its inception and down through the years, service in the cause of democratic school administration characterizes the editorial policy and accomplishments of the AMERICAN SCHOOL BOARD JOURNAL. Covering every phase of school operations — *administration, supervision, finance, personnel management, building design and construction, building operation and maintenance, budgeting and accounting, research, textbooks, equipment and supplies* — it is the guiding influence and outstanding cohesive force directing the united action of the units of control and administration — *the boards of education, superintendents of schools, business managers, schoolhouse architects, and through these units the supervisory and instructional forces.*

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Organization and Administration of Adult Education

George G. Bruntz[1]

I. SOME GENERAL CONSIDERATIONS ON ADULT EDUCATION

Our rapidly changing social and economic conditions require the development of a continuous education which will enable adults to adjust themselves to their changing environment. One writer put it aptly when he said:

> We may as well admit that it is not the education of children that can save the world from destruction; it is the education of adults; it is the adult who must be released from his provincial-mindedness, his animistic prejudices, his narrow customs, his obsolete habits; it is the adult who must be given the chance to be free in a world of science, tolerance, human sympathy and intelligent organization.[2]

Adult education has been going on far longer than most people realize. In its unorganized aspects it is an ancient activity, having appeared in every complex culture since recorded history. Whenever an urgency arose in a particular time or with a particular group that group embarked upon a program of adult education. Danish farmers, for example, embarked upon such a program in the middle of the nineteenth century. Having been defeated in war and having lost their market for wheat they realized that the radical adjustments which this situation necessitated would not be accomplished by an illiterate population. Consequently they undertook to educate themselves as adults and as farmers in a nationalistic era.

The industrial workers of England, in the early part of the same century, also recognized the need for further education not merely to enhance their vocational opportunities but to render themselves more effective as trade-unionists. The result was the spread of workers' education to many industrial areas.

In America adult education appeared after the Civil War in organized form as evening schools, lyceums, and Chautauquas. However, these forms of education were not referred to as adult education.

The original meaning of the term "adult education" was an education designed to even up for the less fortunate adults some of the disadvantages they had suffered in childhood and youth. In this general outlook it was implied that education is properly a matter of the years preparatory to full adulthood, and that it consists primarily in the acquisition of knowledge, and that once this has been obtained it remains a sure possession for the rest of life.

This was the conception in the United States shorty after World War I. The poor showing that our draftees made in that war in the intelligence tests submitted to them gave rise to alarm. A multitude of educational agencies began to spring up and these supplied more or less systematic opportunities for education to those who had been denied the education in childhood. Private agencies such as the YMCA, the women's clubs, American Legion, and labor unions also adopted educational programs.

It was not until 1924 that the organized adult education movement took form in the United States. In June of that year the president of the Carnegie Corporation of New York assembled the first conference on adult education. Reports of great activity in work for the education of adults were being received from England, where interest had been quickened by recommendations made by the British Minister of Reconstruction in 1919. Similar efforts were being made in America, but by many different agencies and through only sporadic activities. This first Carnegie conference was called to consider the possibility of forming some sort of central agency that would draw these various agencies together and thus help to correlate and strengthen their efforts. Two results came from this conference. First, was a series of five volumes constituting reports of different phases of adult education — such as correspondence schools, lyceums, libraries, etc. The second was a growing conviction that there was a genuine community of interests and aims underlying the scattered, unrelated programs of adult education in this country.

In the fall of 1925 a national conference on adult education was assembled in Cleveland and the facts collected by the special investigators were laid before the conference. The conference felt that there was a definite need for an association of people interested in adult education on a national scale. Four regional conferences were held before this final step was taken — New York, November 23, 1925; San Francisco, February 8, 1926; Nashville, Tenn., February 19, 1926; and Chicago, March 24, 1926.

Two days after the Chicago meeting a second conference was held there on March 26, 1926, and the American Association for Adult Education was formed.[3]

This association recognizes that education for adults must be regarded not as a luxury nor as charity, but as a prime necessity for a democratic state. Adult

[1] Director, Adult Education, Los Gatos, Calif.

[2] Joseph K. Hart, Prologue to Part I, *Adult Education in Action*.

[3] See Minutes of the Meeting in *Office Memorandum*, May 26, 1926, Series 11, *Adult Education*, No. 20: Digest of Proceedings of the National Conference on Adult Education and First Meeting of the American Association for Adult Education, Chicago, Ill., Carnegie Corporation of New York.

education must become a major industry in America, comparable to the educational system for children and adolescents: "By the breath of the school children shall the state be saved" says the ancient Talmud. But Glenn Franks applied this sage advice as follows:

> If this ancient axiom is to be true in America, I suggest that we must develop an adult education that will give us adults who will give us better schools that will give us better education that will give us a better social order.[4]

The continued existence and the improvement of the democratic way of life are directly contingent upon the skill with which the adult population sees the problems in personal and social life, solves these problems successfully and, what is more important, develops the will to take the steps necessary to achieve their solution. The growth and extension of knowledge necessary for the development of this skill can be met only through adult education.

The ability of adults to profit by continued learning has been established by Thorndike who reported that the ability to learn increased from early childhood to about 25. From then on it decreased slowly — about 1 per cent a year. His study further proved that childhood is emphatically not the best age for learning. The age for learning that is best in the sense of greatest returns for time spent per unit is in the 20's. Furthermore, any age below 45 is better than ages 10 to 14. Thorndike also points out that a man at 65 can learn at least one half as much per hour as he could at 25 years of age and more than he could from the years 8 to 10.

In this paper we are concerned with three major purposes of adult education. These may be classified as (1) socio-civic; (2) vocational; and (3) cultural or avocational.

The socio-civic purpose is important in a democracy because it aims to increase knowledge so that the individual may become aware of the nature of the problems confronting him. It also provides for an understanding of the inevitability of change as an orderly part of the social process. This begins with an attempt to eradicate illiteracy. It especially seeks to educate that forgotten element in American life, the foreign-born adults. Through English classes, Americanization classes, and parent education classes the adult educators try to reduce illiteracy and make good American citizens out of these people.

Another socio-civic aim is the awakening of the adults to the immediate problems around them. This is done through neighborhood forums, current events discussion classes, and civic problems classes.

Under the vocational purpose, the aim is the adjustment or improvement of the vocation of the adult. The modern shifting of occupations makes adjustments necessary. It has been estimated that the average person may be subjected to two or three major technological shocks during the course of his productive life. Of 18 men between the ages of 24 and 45 questioned in one of the national defense training classes in a typical community during the war period, not one had made less than three vocational shifts in his lifetime and one had made six such shifts.

Now that the war is over adult education faces the great task of readjusting thousands of people vocationally. Only those close to the problem can fully appreciate the tremendous vocational readjustment that these people will have to make in this postwar period. Adult administrators must meet this challenge and must help to re-educate the millions now faced with the necessity of finding new fields of employment.

The cultural and avocational purpose of adult education aims to help the adult to build up his entire personality and to make constructive use of his leisure time. In this purpose we also seek to preserve the spiritual and cultural heritage of the individual and the cultural heritage of America. One factor that no adult education director dare overlook is the opportunity for cultural education. The need for training for vocations and for hurried occupational shifts must not blind us to the greater need for the preservation of our total cultural heritage.

II. SOME ADMINISTRATIVE PROBLEMS IN ADULT EDUCATION

A. The Teaching Personnel

Perhaps the most important problem that confronts an adult school administrator is the personnel problem. Except in a few very large city adult centers where separate evening high schools function, the classes meet for only four to eight hours a week. It is impossible to have a personnel that is on a full-time basis. This means that the teachers must be selected in many instances from the day school staff. The disadvantage of this can readily be seen. It is hard to do a good job of teaching in the evening after a hard day's work at school. And adults deserve just as good teaching as do adolescents. Furthermore, the method of teaching adapted to secondary schools will not satisfy the grown-ups. If the class is dull and uninteresting the people will not come. There is no compulsory attendance law to hold them.

The methods of the teacher of adults must be more flexible than those of the secondary school teacher. The relationship between adults and teachers should be that of companion in learning rather than the more autocratic concept of teacher and pupils. The adults expect the teacher to recognize that they may be as competent in their field of specialization as the teacher is in his. Thus the teacher in adult education can be successful only to the extent that he is able to present his material by methods that appeal to adults and by selecting material applicable to adult interests.

A. B. Moehlman sets up three requirements for adult teachers. In summary these are:

1. A broad general education out of which has grown understanding and appreciation for the democratic process. Above all she should have breadth as well as depth of knowledge.
2. Vitality. The low-energy personality will not be successful in working with grown-ups. This precludes ultimately the use of teachers in adult education who are already physically worn out by the heavy work of the day. From the standpoint of vitality as well as specialized training this work cannot be considered as an "extra-money" activity for the day personnel.
3. Enthusiasm for the work. The teacher is the most significant factor in the success of an adult education program. Many courses are made or "broken" by the teacher who handles it. Just as enthusiasm is important to any teacher in the regular school, so it is important to the teacher in adult classes.[5]

It is to be regretted that there are as yet no teacher-training institutions that provide training for the adult education personnel. Until this training is regular and systematic the adult administrator must select his teachers on the basis of their general education, their vitality, their enthusiasm and natural interest, and then stimulate them to secure more extended general "refresher" training during the summer months.

B. Physical Equipment

Schools have been built in the past for daytime use only. And they have been built for youngsters. The lights are poor for evening classes. The seats were meant for children and adolescents. The result is that few rooms are usable for adult classes. The more progressive teachers in secondary schools have done away with the desks and have had tables and chairs put into their rooms. This works very well for adult classes. But until school buildings are planned for the total educational program of the community — children, adolescents, and adults — the directors of adult education are going to be confronted with the problem of physical equipment.

In connection with this problem of physical equipment is the problem of conflict with day school teachers. The same rooms that day teachers use are used at night. If materials are used which the "regular" teacher uses, there is a conflict. If the blackboard is used and the adult teacher forgets to erase the board, or she erases some material the day teacher wanted saved, there is conflict.

The only way to solve this problem is to educate the day school people to the need of adult education and to the fact that education today takes in more than just the children and the adolescents. If the director's persuasion and the day school principal's support does not clear the

[4]Glenn Frank, "To Better Our Social Order," *Journal of Adult Education*, February, 1929.

[5]A. B. Moehlman, *School Administration*, Boston, 1940, p. 588.

situation, the adult director has a problem on his hands that cannot be solved entirely.

Now that the war is over adult educators, particularly in California, are planning their own buildings to be used exclusively for adult purposes. This is a step in the right direction. This writer for one hopes that in the not too distant future every community will have, not only an adult program, but also proper housing for such a program. With state and federal funds available now, this dream can become a reality if only the adult leaders will plan a long-range program for the adults of their community.

C. Finances

In general, adult education is financed by one of three ways, depending on the sponsoring agency. First, by semipublic means, such as the YMCA and labor unions. Second, by the local school district. This is a poor way of supporting an adult education program, because most governing bodies of school districts feel that the responsibility of the public school system ends with graduation from high school. Hence they are hesitant to support an adult education program. Furthermore, the inequalities arising from such a system would make adult education weak in some districts and strong in others.

The best method of financing adult education is the system used in California and several eastern states. This is a joint undertaking by the local school district and the state, attendance at adult classes is counted on the ADA principle and the state reimburses the local district according to the average daily attendance.

In California Senate Bill 261 now governs the establishment of all adult classes and the reimbursement to the local districts for such classes. The first thing to remember is that this bill makes it necessary to keep separate records for adult classes and regular day classes. The amount apportioned to a school district for classes for adults during any school year may not exceed 85 per cent of the current expenditures of the district during the preceding school year for such classes. This means that the administrator should keep a careful check on expenditures, including such items as janitorial service, lights, and heat. Each three hours of attendance now constitutes a day of attendance. The average daily attendance in classes or schools for adults is computed by dividing the total days of attendance therein during an entire year by 175. In addition each district is allotted an administrative allotment of $50 for each of the first 40 units of ADA.

The state support for adult education is augmented by special federal aid made possible by appropriations from the Smith-Hughes and the George-Deane vocational education funds administered under the provisions of the federal and state vocational education acts and the California State Plan for Vocational Education. Under this the state board for vocational education reimburses school districts up to 50 per cent of the salary of the teacher who is conducting an approved class. These classes must be trade extension classes and be offered to adults who already are in the trade or occupation to which the training relates. Such classes as agriculture, homemaking, and trade and industrial education come under this. In addition the George-Deane Act provides funds for vocational education classes in business education and the distributive trades.

School districts may charge a fee not to exceed $6 a term. In general, however, no fees are charged for adult classes. Some schools charge only 50 cents a term, except for English and Americanization classes for which no fee is collected.

The salaries of teachers are also set by the local board. While there is a wide range throughout the state, the average rate of pay is $2 per hour.

D. Public Relations

The adult director is probably more concerned with public relations than any of the school administrators. The reason is that he is dealing with the public — his "pupils" are the public. An adult education center should be a center of ideas. Its program must be such a reflection of human wants and needs that the people of the community recognize in its offerings the goal of their search for an opporunity to continue their personal growth. When an adult educator starts to organize a center that will meet the needs of his community, he must consider the type of people with whom he has to work. He must know clearly whether his plan of adult education is directed to a cross section of the community; to workers in industry, to those recenty from high school or to college graduates. This can only be done if he has kept in touch with his community.

Although the director of adult education need not be a "joiner" yet it is important that he get contacts in the community. A speech before the women's club, an after-dinner speech at the Kiwanis, Rotary, or Lions Club are all means of getting contact with the public. He should be at home at parent-teacher, church organization, and other types of meetings.

Above all he should cultivate the friendship and co-operation of the newspapermen. Newspapers are the strongest force in a community for publicity on school matters. Feature articles dealing with some phase of the adult center should appear often. If one can be arranged for a Sunday paper, in the form of an interview, it will have far-reaching results. It is doubly valuable if a picture accompanies the story. Editors as well as readers like pictures.

Only attractive posters should be displayed if this form of publicity is used. A poor poster has a cheapening effect. Libraries, social institutions, and business organizations welcome attractively done, moderate-size posters for their bulletin boards or windows.

Of course, every person on the carefully prepared mailing list will receive a copy of the adult schedule or adult handbook several weeks before the opening of classes.

No two administrators will attack the problem of public relations in the same way. But whatever the plan of attack, it must be remembered that it should be dignified, well planned, and intelligent.

In adult education, as in everything else — yes, I am inclined to say, more so than in anything else — the leadership has really to lead. Adult education must give people what they come for, but it must also give them more than they come for if it is to realize its greatest potentialities.

III. FUTURE TRENDS IN ADULT EDUCATION

The future of adult education is filled with promise. With the population decreasing and the balance shifting to the older members of society, adult education will play a greater and greater role in all education. It is also destined to play an increasingly important part in the preservation of democracy. As Lucy Adams puts it:

> It (adult education) is a preservative of democracy; a prop of stability; a horse upon which we vainly pursue the fleeing boundaries of knowledge; a bridge between the generations; a cement strengthening group spirit and group thought and action; a restorer of lost arts and handicrafts; an insurance against misspent leisure; a weapon in the economic struggle.[6]

Local boards and local communities will come to recognize more and more the significance and importance of adult education. The trend will not only be toward the extension of adult education but it will be in the direction of education for the different interest groups. We will probably witness a healthy growth in labor education, women interest education, consumer education, etc.

Another important trend will be in connection with radio education. The radio today is giving more and more time to the discussion of social, economic, and civic problems. These can be used as a basis for local discussion groups under trained leaders. The Town Meeting of the Air, with study clubs all over the country, is an example of what can be done in this field. Listening centers which develop an appreciation of good music are only in their infancy and will grow rapidly in the future.

In the not too distant future adult classes will operate during the daytime instead of the evenings only. If adult education is to make any great advancement in America and fulfill its possibilities to the maximum, adult centers must devote themselves to the needs of all men and

(Concluded on page 92)

[6]Quoted by Moehlman, *op. cit.*, p. 582.

Eliminating School Debts —

IT CAN BE DONE!

Allen P. Burkhardt[1]

In the shape of a national debt we Americans owe nearly $300,000,000,000. That, say certain politicians, is nothing to worry about. To prove their point they take their own advice and don't worry about it. They not only don't worry about it, they go right ahead spending more and more of our money for projects and bureaus which they themselves don't even attempt to defend except on the grounds of "emergency." Not only that, these same politicians, with both eyes on the ballot box and both hands in the federal coffers, reduce our federal income taxes. Having done so, they swell and beam and exude false optimism as they shout to their constituents the blessings of the reduced income tax schedule. They feel confident that they have just garnered more votes at the next election. The fact that the budget is not balanced, that there will be another deficit at the end of the next fiscal year, seems to bother them not at all. They go blithely on their way reducing taxes, spending money, declaring emergencies and crises, and winking at the Gargantuan national debt.

They solve the problem of inflation by sticking their heads, ostrich fashion, into the sands of their own complacency and shortsightedness, pulling them out only long enough to allow themselves and their followers increased expense accounts which they justify on the basis of "unusual circumstances" with which they find themselves surrounded.

Most of us, seeing the Roman holiday which is now being enacted in high places, sit supinely by hoping against hope that our ballot box politicians won't mismanage us into chaos and confusion. It is a dark picture. Nothing unites a nation more closely and more certainly than war. Nothing disunites a nation more certainly than runaway inflation and economic chaos. As a nation we are tottering on the brink of national disaster. We find ourselves in that precarious position because our politicians have looked to the ballot box but we, as voting citizens, have not. It would behoove us then to look well to our ballots, to elect to all public offices statesmen instead of politicians, men of vision and of courage, men who can do more than merely cry "emergency" and write checks.

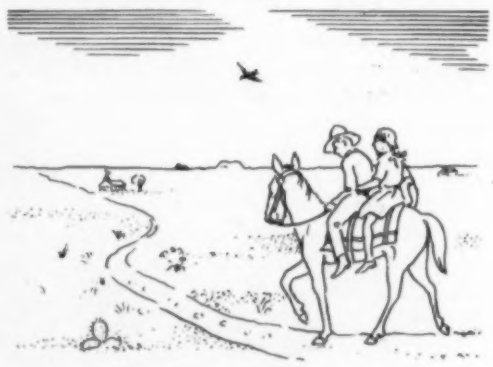
A Contrast in Financing

It is, therefore, heartening to see that during all this period of spending and wasting and alibiing that certain governmental agencies are being well managed. Without a doubt, the schools of America, as a class, are the most efficiently managed of all governmental agencies. The taxpayer probably gets more for the tax dollar which he spends for education than for any other tax dollar. This is true because most board of education members are serving unselfishly with an eye to the welfare of their children and of their communities. They serve without pay and often without thanks. They don't need many words of praise, because they have the satisfaction of knowing that they serve a worth-while cause and that they are building carefully for the future. They move ahead confidently because of their sincerity of purpose, because of their own ability and vision, and because they employ experts to help them manage their community's biggest and most important business.

The school District of the City of Norfolk, Neb., has been exceptionally fortunate in having during a long period of years board members of the highest type, board members who, even while great waves of government spending and careless government action were beating against them, could coolly and confidently operate an efficient school system and at the same time retire a large bonded indebtedness. In 1935 the Norfolk school district was $604,000 in debt. The annual interest bill was $26,022.50. The depression, in spite of government spending and pump priming, was in full swing.

How the Debt Was Retired

The board of education in 1935 set up a bond refunding and retirement plan that has worked so successfully that October 23, 1945, ten years later, the district found itself free of all debt. This means that the debt was retired at the rate of a little more than $5,000 a month for 120 months. It means that the annual interest bill today is exactly nothing as compared to $26,022.50 ten years ago. In addition to retiring the debt, a building construction fund of nearly $60,000 has been created. All other funds also have ample surpluses. The school district has not registered a warrant since 1931. The annual mill levy, in spite of a greatly reduced valuation (25 per cent under 1931), has, during this period, stayed well within the legal limits, and is not a great deal higher than it was before the retirement program was inaugurated. Although teachers' salaries were increased $17,000 for the current school year, the budget was reduced $11,000. This was possible because it was no longer necessary to make a levy for interest or for debt retirement. During the school year 1946–47 salaries and operating expenses can go still higher without increasing the levy.



The board's retirement plan was simply this — every block of bonds was studied carefully. When the option date of a block of bonds arrived, the board retired as many bonds as possible, using for this purpose surpluses in the sinking and general funds, and then refunded the balance. Interest rates were reduced from as high as 5 per cent to as low as 1 per cent. All bonds, when refunded, were made to come due on a serial basis. The board committed itself to the retirement of $30,000 of serial bonds a year and then found that it could retire an equal amount each year by using surplus money in the general fund. The following table shows how the plan worked:

Date		*Indebtedness*	*Annual Interest*
	1935	$604,000	$26,022.50
Aug.	1936	591,000	22,122.50
Feb.	1937	519,000	17,873.33
Sept.	1937	506,000	17,687.50
Feb.	1938	496,000	17,437.50
Sept.	1938	479,000	17,077.50
Nov.	1938	449,000	16,102.50
Dec.	1938	404,000	14,752.50
Feb.	1939	394,000	14,452.50
June	1939	391,000	12,897.50
Jan.	1940	369,000	12,415.00
Feb.	1940	365,000	11,452.50
June	1940	365,000	11,452.50
Sept.	1940	355,000	11,327.50
Feb.	1941	345,000	8,602.50
March	1941	308,000	6,962.50
Sept.	1941	297,000	6,106.25
March	1942	253,000	5,425.00
Jan.	1943	248,000	5,337.50
Feb.	1943	217,000	4,850.00
March	1943	207,000	4,650.00
March	1944	162,000	3,837.50
Oct.	1944	85,000	1,462.50
Jan.	1945	70,000	1,087.50
March	1945	30,000	300.00
Oct.	1945	.....	.....

Taxpayer Not Overburdened

The average annual total school levy for the ten-year period prior to 1935 was 20.24. The average valuation during that period was $10,451,646: for the ten-year retirement period the average annual levy was 21.44, the average valuation was $8,602,027. The levy for the current year is 21.99. The current valuation is $8,342,330. These figures indicate that the debt

[1]Superintendent of Schools, and President of the Junior College, Norfolk, Neb.

was retired without overburdening the taxpayer. As a matter of fact, when the drop in valuation, as well as the levy, is taken into consideration, it will be seen that the taxpayers were called upon to produce less money for school purposes during the debt retirement period than they were during the ten years immediately preceding.

In order to make as much money as possible available for bond retirement purposes, many administrative and operational economies were effected. For example, the annual insurance bill was reduced from $2,043.69 to $601.91 and the annual water, light, and power, bill from $3,248.79 to $1,445.82.

These savings and others of similar nature were effected without hindering the educational efficiency of the schools. During this ten-year period of debt retirement, the schools made steady educational progress. A new Smith-Hughes agriculture and industrial arts building was constructed at the senior high school, a junior college was established, and other progressive steps were taken.

What the schools of Norfolk, Neb., have done, many other schools have also accomplished. Most schools are operating efficiently and economically. If the schools can operate efficiently and economically, so can the other governmental subdivisions. Every tax-supported institution has a stake in every tax dollar. The American people can pay out only so many tax dollars. The more efficiently each tax dollar is spent, the better off the various tax-spending agencies will be.

Perhaps taxpayers and citizens should take a lesson from our politicians. They keep their eyes on the ballot box for selfish reasons. It would behoove us, as citizens, to look well to our ballots to the end that statesmen and not politicians might occupy seats of power and of honor. Then, and only then, will there be an end to deficit financing. Then, and only then, will our economic structure be safe from collapse. There are in America many strong men who still believe in sound government finance; who still believe that each generation should pay its own way; who still believe that it is unfair for one generation to saddle all oncoming generations with an overwhelming debt. Let us look well to our ballots. Let us supplant governmental mismanagement with sound businesslike management. Let's pay our own way. It can be done!

For Adolescents and Veterans —

Correspondence Courses as Aids to Local Teaching

Floyd W. Hoover[1]

It has been the experience of many administrators that most beginning teachers are more or less bewildered during their first year or so of teaching. In spite of their courses in education and in spite of their practice teaching, they are frequently at a loss to know what to do, especially if they are called upon to teach subjects in which they have had no practice-teaching experience — and in some cases during the war years — if they have had little or no training in fields in which they are expected to teach.

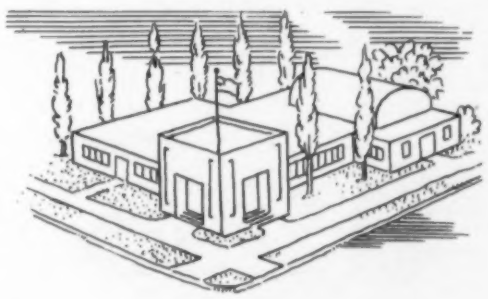
Some teachers always remain weak. They simply do not have the powers of imagination which are necessary for dynamic teaching. Yet teachers such as these sometimes remain in the profession for years.

The upshot of all this is that an administrator can be reasonably sure that an inexperienced teacher will make rather little forward progress for an indefinite period of time. If the administrator has chosen wisely and if he is lucky, the teacher will "find" himself before the close of the year. If he is unlucky, the teacher will remain one who hears lessons assigned in the textbook.

Foolproof Materials and Methods

In correspondence-study courses a wealth of foolproof material is available that can enable an inexperienced and even an under-trained teacher to begin and finish the year like a veteran if he has a modicum of poise and ability. If the materials are employed as an aid for the teacher, there would be no loss to the pupils in terms of learnings while the teacher "found" himself. The morale of the school does not suffer from the realization that one of its staff members is weak and unable to stimulate learning.

By way of illustrating the possibilities of using correspondence study courses in local schools by local teachers, let us suppose we have a new teacher of ninth-grade English, a teacher who has just been graduated from a teachers' college without distinguishing himself scholastically, but with entirely average marks. He has been exposed, perhaps, to some pretty forward-looking theories, although, unless his opportunities were exceptional, he has never seen them put into practice. He perhaps earnestly wants to be progressive, but he has had little opportunity to discover what parts of the theories he can apply and what parts are, for him in this new situation, impracticable. Nobody has told him because nobody can, except the administrator who may have taken only the few required courses in English and therefore may be little qualified to be of real help.



So the new teacher starts out on the opening day of school with a textbook and assigns the first few pages for the next day's lesson. And he tries to recall how *his* high-school teachers of English went at this business of teaching.

A Beginning Aid

If, by contrast, the principal had previously placed in his hands the correspondence-study course, **English Ix,** for example, for his use and not necessarily for its direct use by pupils, he could begin the first day by introducing the course and the first unit as the authors have written them on pages 1 to 3 and by using the pretests which are given on pages 0 to 3 of the review unit. The teacher would not, of course, *read* to the class the introduction but would give it in his own words from notes. The rest of the period could be devoted to issuing the textbooks listed, explaining what kinds of writing materials are to be used, what is required by way of time spent on study, and the kinds of tests that will be used and the frequency with which they will be given. All this is ready for use in the first part of the course. Thus there would be no delay in getting started, and there would be an immeasurable gain in prestige for the teacher, for pupils are sensitive to feelings of assurance on the part of the teacher.

The next day the lesson could be handled by giving the check test on page 6 and then by discussing the answers or by discussing the questions without writing

[1]Director of Curriculum Planning, Extension Division, and Assistant Director of Admissions, University of Nebraska.

the answers. There would still be plenty of time left in the period for introducing and assigning lesson No. 2, page 7, and for supervising much of the pupils' preparation for the next day. Parenthetically, these last phases in the teaching process — introducing, assigning, and supervising — are far too often completely neglected. There could be little excuse for omitting them if the correspondence course were followed.

And so on completely through the entire course as it was developed by the authors, or until such time that the local teacher's stature had increased to the point where he had attained enough independence to enable him to depart with the local administrator's approval from the correspondence-study course.

Individuality Not Destroyed

This plan would function not only for teachers of English but also for teachers of all subjects offered by the high-school department of an extension division. It would almost guarantee that the teaching in local schools would be in accordance with theories of pedagogy which are modern, and would almost certainly guarantee further that the learnings of pupils would be reasonably adequate despite, at least in some degree, the lack of training of the local teacher.

It might be argued that a plan such as this would destroy initiative on the part of the individual teacher. For the moment, let us assume that it would in the cases of teachers who lack imagination. The best answer to the argument is this question: "Is it better for teachers of doubtful capabilities to retain any initiative they might ultimately develop and thereby sacrifice the interests of present pupils, or should the learnings, both direct and concomitant, of the pupils be considered of more importance than the possible development of imagination on the part of a teacher?"

Teacher and Pupil Contacts

It is not likely, however, that fears on this score would materialize. Teachers who have latent abilities would use the materials of the correspondence-study courses as springboards for the development of their own teaching. After a period of use, such individuals would, in all probability, expand and enrich enormously their courses which had been founded upon the courses of a university extension division.

In connection with this, sight ought not to be lost of the fact that teaching is, fundamentally, an art and not a science. It is always characterized and colored by the individuality of style that stamps the work of each teacher. Even if the administration of the local school and the cooperating extension division so desired it, the teaching process could never, at least in the light of our present knowledge of it, be standardized completely. The personal equation that grows out of the teacher-pupil relationship inevitably influences for better or worse the process and, *ipso facto*, the end product. At most, it could be hoped only that the aid offered by the correspondence-study courses would be such that pupils would be assured of, as was suggested previously, reasonably adequate learnings.

The effectiveness of the plan in terms of the improvement of local teaching would hinge upon the combined wisdom and vision of a university extension division's personnel and the personnel of participating schools. The wisdom and vision of both groups would insure, too, the prevention of any tendency toward stultification that steps in the direction of standardization might bring.

Cooperation Spells Success —

The School Library and the Principal

W. H. Morris[1]

Much is written these days about the school library — its function in a live and dynamic school program, the qualifications and duties of the librarian. Little has been said in a definite way as to the relation of the principal to the support, management, and success of the library. Has this omission been an oversight or has it been taken for granted that the principal is in full accord with library objectives and is helping the librarian meet current standards? Or are librarians a bit shy about pointing out the principal's duties? Certain it is that almost no writing administrators select the school library as one of their enthusiasms. We talk and write about the subjects we know and like best.

The Situation

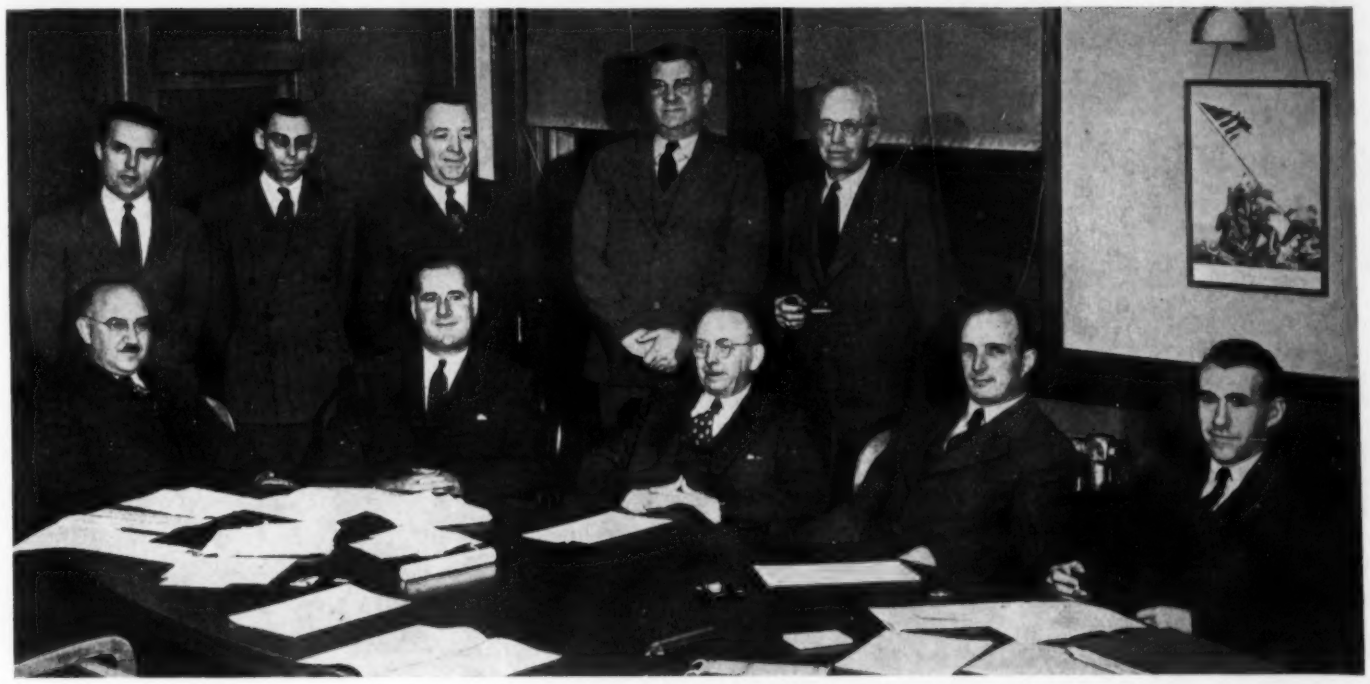
Being the principal of a junior high school with an enrollment of 1100 to 1200, I think it might be profitable to us school folk to review the library situation from the viewpoint of the principal. Too often in the building of a new school or in the remodeling of an old one, the planning has been left almost entirely to the architect whose knowledge of details for different departments of the school is not sufficient. The library has been retarded in its development because it has not always shared in the scientific planning and management given to other departments. It is still not fully understood by all of us that there are standards for library equipment and organization that have been tested for usefullness and economy, and that much time, money, and effort may be saved by accepting plans and systems tried and approved rather than by substituting cheaper or more showy ones. Too many school libraries today are beautiful examples of architecture totally unsuited to effective library service.

The principal — and his librarian, if he has a good one — should be called in to assist in planning this school unit. As the library supplements the work of every department and should serve every pupil in the school, the principal should do all in his power to see that this unit is planned thoughtfully and generously, to give fullest service and provide a harmonious environment for the use of books. The library must attract by appearance as well as usefulness. Some principals will be more fortunate than others in this physical setup. But, whatever the situation, it is his duty to see that the unit is equipped to the best that money and space will permit.

Choice of a Librarian

Fortunate is the principal — especially in a junior or senior high school — who is called in for consultation before a teacher is chosen or assigned for work in his school. As a rule he knows better than the personnel director just what he needs and wants in each school position, and often he has

[1]Principal, J. L. Long Junior High School, Dallas, Tex.



The Torrington, Connecticut, Board of Education

Standing, left to right: Joseph Metro; Dr. James Houlihan; John Horwath; Edmund K. Brown; Eric Stowe. Seated, left to right: Fiore Petricone; John F. Murphy, Supt. of Schools; Robert S. Storrs, Chairman; Joseph P. Maine; Clement C. Holbrook, Secretary.

Facing the heaviest schedule of Board activity in a number of years, the Torrington School Board has acquired twenty-two acres of land for the construction of a new modern elementary school with recreational activities for the entire school community. In addition, the Board is working toward the installation of a single salary schedule and the modernization of a rural school in Burrville, an adjacent community, under its jurisdiction.

information on personal traits, habits, and ability of the applicant not known to the personnel director or superintendent.

The principal should insist that the librarian be chosen on the basis of her academic and library-science training. As for other characteristics — personal appearance, poise, sincerity, etc. — they should carry the same influence as in the selection of teachers for the other departments. Place your librarian on a par with the heads of the English, science, and social studies departments. If, and when, you have found a good librarian, pay her and keep her. Make her position in your school worth something. If your choice proves a failure, fire her and try again.

Principal's Attitude and Philosophy

The library has been called the universal laboratory of the school. If the school is to guide those who enter, it must build around the library. It is there to aid each department in guided reading and source material for preparation of assigned work, to guide pupils in reading for leisure time and pleasure, to train them how to find and use books.

How the principal looks at and plans for the different functions of the library determines its success or failure. The principal should advise with his librarian and let her have some voice in the establishment of the policies governing the library. This valuabe room is not the place for a study hall nor a catchall for pupils sent from classes for misconduct. Nor should the principal permit any interruption for *PTA* meetings, teas, and the like. The library is for the distinct purpose of furnishing service to boys and girls who wish to work with books and similar materials.

The principal should give the librarian moral support and give her the same interest, encouragement, and opportunity for educational leadership that are offered to other specialists on the staff. He should insure that there is an understanding on the part of the faculty of the educational values, functions, and possibilities of the school library. It is his responsibility to state the philosophy of the school and its objectives and then work out with the librarian the contributions which the library can make.

Standards of School Library Service

In the growth and development of school libraries certain definite standards for library service have been established. These standards are set forth by the American Library Association and by the Southern Association of Schools and Colleges and other regional accrediting agencies. We shall not list them as they are available for anyone who is interested.

It is the responsibility of the school administrators to put the standards into effect if they really want effective library service. Especially is this needed in large school systems with many principals and many libraries. Each school should not be left to its own plans and resources, but there should be a uniform policy for all. In addition to the established standards there is another very definite help that the administrators can offer the librarian — that is a "Library Bulletin." Every other department of the school receives courses of study and bulletins giving very definite lines of procedure. So the teacher knows what to do and what to expect from her administrative supervisors. The librarian often has no bulletin of procedures and instructions and so is never sure just what policy to follow. She feels that there is nothing stable from year to year.

For the best results the administrators in conjunction with the librarians should work out a bulletin of library policy and procedure covering every phase of the library work.

A Daily Library Schedule

The library should receive the same consideration in the planning of the daily schedule as any other department. The library must be recognized as an integral part of school service if it is to operate effectively. In too many instances it would seem that the library is just tacked on — a place to give out a few books. Its educational value, its opportunities for influence in the guidance of boys and girls are all but forgotten.

In a junior high school each seventh- and eighth-grade section should have as-

(Concluded on page 92)

It's Time to Reduce —

The Teacher Shortage and the Teaching Load

Agnes G. Gunderson[1]

Isn't it time we do something about the teacher shortage? What can be done about it? How remedy it? The first essential is, of course, to find the cause for the shortage. Why do not young men and women enter the teaching profession? As first and major cause, no doubt, is salary. This factor has been so ably discussed in recent issues of popular magazines and professional journals that no further comment need be made here. Then there is the oft-repeated statement that teachers are "fenced in" by the communities in which they work and are not free to live their own lives — this article will not enlarge upon that theme. But there is another factor, one not frequently discussed, that undoubtedly contributes to the teacher shortage, and that is the teaching load — the pupil enrollment per teacher. This is a problem that must be met by school administrators. Theirs is the duty to interpret to their communities the need for a change in school practice. The lag between educational theory and educational practice is absurd, and calls to mind the "lame duck" Congress. We have for years talked so glibly about individualizing instruction, emphasizing the individual child, e.g.:

Take the child where he is.

Give each the help he needs.

Teach not school subjects, but the whole child.

Do not neglect the gifted child — he is the leader of tomorrow.

Do not overlook the less gifted child — he may become a liability to society.

See that each child works up to his capacity.

These are only a few of the long list of commandments which teachers are expected to observe and carry out. We have no fault to find or criticism to make about accepted educational methods or purposes — they are evidences that we have progressed far since the Colonial days, when teaching the three R's made up the teacher's work. Yes, in theory we have gone forward. Also our courses of study have been improved, our teachers are better educated, our school buildings are a far step from the old little red schoolhouse. But take a look inside the classroom of today and you will see what you could have seen in the little red schoolhouse generations ago: *one* teacher with 35, 40, 45, and even 50 pupils! What possible expectation can the teacher have of achieving all the objectives set up for her with so many children, all different personalities? Small wonder that the teacher becomes discouraged over the enormity of the task required of her and decides to enter some other field of work that demands less responsibility and nervous energy. We know and hear of the satisfaction teachers feel over the success of their former pupils — little is said, but equally great concern and regret is felt over a former pupil who becomes delinquent and again and again comes the thought, "if only I had understood him better and had had more time for him, I might have helped him."

How Much Time for the Individual Child?

Have you ever stopped to figure out how much time a teacher can give to each child per day? In a school day of five and a half hours (9 to 12, 1 to 3:30) there are 330 minutes. If there are 45 children in the room, each child may get seven and a third minutes. Seven minutes a day to help each child master the prescribed course of study with all its different subjects, bring the retarded child up to grade, provide the gifted child with opportunities suited to his ability, and guide and help each one of the 45 different children develop physical, mental, spiritual, and emotional health! The outlook is not hopeful for a feeling of satisfaction over a job well and thoroughly done. Instead there is likely to be a feeling of frustration over the inability to do what so clearly should be done.

With all our talk of individualizing instruction, taking each child where he is, give each child the help he needs, etc., it is practically impossible to do so under the present administrative setup which places up to 40 and more pupils in the care of each teacher. It is becoming increasingly more difficult also as the tendency grows to promote each and every child whether or not he is ready for the next year's work. A grave situation is arising in our schools brought on by the recent war. The armed forces, the army and the navy, the WAC's and the WAVE's have taken many teachers from our schools. The defense and war industries with the attractive wages have taken many more teachers and potential teachers from our ranks. This has necessitated the closing of many schools, hiring inadequately prepared teachers, and increasing the pupil enrollment per teacher.

Such a situation is especially serious for the pupils in the primary grades where they are laying the foundation in the skill subjects, particularly that of reading. It has been not unusual during these war years for a child to have two and even three or four teachers a year, with occasional substitutes. Think what confusion and bewilderment this means to the child who is just learning to read! Then at the end of the year, with the school's policy of "100 per cent promotion — no failures" all the children, whether or not they are ready for the next year's work go on to another grade; a few, perhaps, to keep on doing failing work day after day. After all, moving a child to another room does not in itself remedy failure. After two or three years of this, the retarded child reaches the intermediate grades with a reading ability below that required for the grade, and yet the amount of reading expected of him is increased. The teacher in the intermediate grades must then, in addition to teaching the work of her grade, also teach the reading and other skills to those deficient in them. Can that possibly be done in the seven minutes a day allowed per pupil? Thanks to their conscientiousness, classroom teachers have done so in many cases by working overtime and giving outside help. But what about the children who fall by the wayside, those who failed to achieve their possibilities and became discouraged, became disciplinary problems, and dropped out of school because they didn't like school and yet they had the ability to do satisfactory work? How can we answer their accusations that schools are not meeting their problems, that not all children are starting on the road to successful and happy lives? Isn't it time to face facts?

Some Practical Means for Improvement

Something can be done about it by improving our schools. If there is truth in the statement, "As is the teacher, so is the school," this means better teachers; and now, right now, is the time to look for and plan for better teachers and better schools. Now is the time to work for bigger budgets, and to make such departures from traditional school practices as may be necessary to make young men and women see teaching as a profession worthy and satisfying to enter. The following suggestions are offered in the belief that such changes will enable teachers to better guide and help each child:

1. Extend the school system to include kindergartens, and promote children to the first grade when they are ready for such work.
2. Where entrance to the first grade must be based on chronological age,

[1]University of Wyoming, Laramie.

raise entrance age to at least 6 years. (Six years and 6 months M.A. has been found to be the optimum age for beginning reading.)

3. Limit the pupil enrollment per teacher to 25 in the first and second grades, and to 30 pupils per teacher in the intermediate grades. With an enrollment of 25, it is possible for a teacher to give some individual help and guidance to each child. (It is ironic that some college and high school classes are limited as to enrollment while the primary grades wherein the children are *so* dependent upon the teacher's help, are not.)
4. Add a special teacher to give individual help to any child retarded because of prolonged absence due to illness, or unreadiness for certain work. Such a teacher is especially needed right now to help those who have become retarded in recent years because of interrupted schooling, frequent transfers, poor teaching, etc., brought on by war conditions.
5. Provide an opportunity or ungraded room for those children who are mentally retarded.
6. Relieve from noon duty all teachers who have a full day's schedule of teaching. (Industry has found that no letup from work over a period of several hours reduces efficiency. What about the nervous strain of being with a roomful of youngsters for six hours and more with no time off, even for lunch?)

Carrying out the first four suggestions listed will reduce greatly the number of pupils doing failing work in the elementary grades; it will also provide opportunities for teacher and pupils to know each other better.

Such changes will mean more money, more taxes. But can there possibly be a better or wiser expenditure of money than that which provides a good environment for our children? What more valuable resource does any community have than its children? Taxpayers are not likely to begrudge money spent for improving their schools if they see the real need for such improvement, and what such improvement means for the welfare of their children. Interpreting the school and its needs to the community is one of the greatest responsibilities of the school superintendent, but is often overlooked under the pressure of other duties. The school system that initiates a change in school practice by limiting pupil enrollment to 25 per teacher in the primary grades and 30 in the intermediate grades, and raising the entrance age to 6 years and more is likely to find itself as widely known. Furthermore, if with lightening the teaching load, it also offers good salaries and desirable living conditions to its teachers, it will have made the teaching profession so attractive that teachers will seek it, hence no teacher shortage there.

A Fair Deal —

Utah's Compulsory State-Wide Salary Schedules

*Roald F. Campbell, Ph.D.**

As far as the writer knows, Utah is the only state in the nation in which school districts are required by law to formulate and use a salary schedule in the determination of teachers' salaries. Some analysis of the evolution of such a statute and how it operates will be given here.

When the legislature met in January, 1943, the increased cost of living, the shortage of teachers, and consequently the dire need for more school revenue were apparent. As a result the legislature increased customary state aid, by enactment of an emergency measure, by $1,316,000 per year. In order for districts to participate in this new revenue one of the stipulations of the legislation required that,

> the board of education of each district shall prepare and adopt a schedule of salaries for teachers, principals, supervisors, and other professional employees and annually file the same with the state board of education.[1]

Further provision made it mandatory that beginning teachers with less than a bachelor's degree received no less than $840 per year, those with a bachelor's degree no less than $960 per year, and those with a master's degree no less than $1,056 per year. Moreover, districts were required to increase salaries for each year of experience an average of not less than $45 per year. In effect, then, a minimum salary schedule for the state was established.

This law applied during the school years of 1943-44 and 1944-45. During each of these years the state board of education was able to receive a salary schedule from all school districts of the state. Since the law did not stipulate the date for the filing of schedules with the state board many of them came in near the end of the fiscal year after most of the salaries which they were designed to govern had been paid out. Some of the schedules were rejected by the state board of education because of indefinite or elusive provisions. One schedule, for instance, contained the clause that the board of education reserved the right to depart from the schedule as it saw fit. These inadequate schedules were returned and suggestions made for their revision. In a few instances districts merely conformed to the minimum salary schedule which was stipulated in the law.

Having Only Forty Districts Helps

Clearly the administration of a compulsory state-wide salary schedule law was facilitated by the fact that in Utah there are but 40 school districts. In 1915 Utah passed legislation requiring the consolidation of school districts, the majority of them to be made coterminus with county boundaries. Thus, the state board of education had but 40 salary schedules to obtain, to study, and to accept or reject.

In January, 1945, there was a definite feeling in the state, as reflected by a governor's committee on school finance and by the legislature, that the emergency legislation enacted two years earlier should be replaced by a more permanent program of increased state aid for schools. Consequently an appropriation of $2,311,000 per year was made from the general fund over and above the regular state funds which had existed prior to 1943. Again one of the requisites for participation in this additional state revenue was the requirement that each school district "prepare, adopt, and comply" with a salary schedule for teachers. That portion of the law follows:

> No school district within the state shall be entitled to participate in the fund hereby appropriated unless the following conditions are complied with:
>
> *a*) The board of education of each district shall prepare, adopt and comply with schedules of salaries for all classes of employees wherein they have three or more workers. Schedules of salaries in effect shall be filed annually with the state board of education on or before October 1 of each year.
>
> *b*) Regular teachers who do not hold a degree shall be paid not less than $940 per annum.
>
> Regular teachers who hold a bachelor's degree shall be paid not less than $1,060 per annum.
>
> Regular teachers who hold a master's degree or more shall be paid not less than $1,156 per annum.
>
> *c*) There shall be an increase in salary of teachers in excess of the minimum salary above mentioned to teachers who maintain their legal certification and who meet the professional growth requirements of the district of an average of not less than $50 per year for at least 16 years of experience, as accredited on the records

*Salt Lake City 1, Utah.

[1]Laws of Utah, 1943, p. 116.

of the local school district, *provided* that there shall be an average increase of not less than $50 per year for all teachers having six years of such experience, as accredited on the records of the local school district.[2]

Again, as may be noted, a state minimum salary schedule was established. This schedule, as interpreted by the State Department of Public Instruction, is shown in Table I. The language regarding compliance with the schedules adopted by the districts was made more forceful than in the previous legislation. Filing of schedules with the state board of education was made mandatory as of October 1 of each year.

TABLE I. Minimum Salary Schedule for Teachers in the State of Utah Beginning July 1, 1945

Years experience	*Less than bachelor's degree*	*Bachelor's degree*	*Master's degree*
0	$ 940	$1,060	$1,156
1	990	1,110	1,206
2	1,040	1,160	1,256
3	1,090	1,210	1,306
4	1,140	1,260	1,356
5	1,190	1,310	1,406
6	1,240	1,360	1,456
7	1,290	1,410	1,506
8	1,340	1,460	1,556
9	1,390	1,510	1,606
10	1,440	1,560	1,656
11	1,490	1,610	1,706
12	1,540	1,660	1,756
13	1,590	1,710	1,806
14	1,640	1,760	1,856
15	1,690	1,810	1,906
16	1,740	1,860	1,956

The beginning salary, salary for the sixth year, and for the sixteenth year are compulsory minimums. Rates of increase during intervals between these points are optional with local districts.

Three-Fourths Compliance Secured

Utah is thus in her third year of experience with compulsory state-wide salary schedules. On January 2, 1946, the writer visited the state department of education to make some analysis of the operation of the salary schedule law. On that date he found that 30 of the 40 school districts had filed salary schedules. In one case, however, the schedule consisted merely of a list of teachers employed and the annual salaries to be paid each. Such a list does not appear to comply with the law, and it will probably be rejected by the state board of education for that reason. Since schedules have been requested of all districts there seems little excuse for 10 of the 40 districts to be more than three months late in complying with the law.

In the 30 salary schedules examined, beginning salaries for teachers with four years of training ranged from $1,060, the state minimum, to $1,500. In three of the districts the state minimum was used, while 16, or a majority of the districts reporting, used $1,500 as the beginning salary.

Maximum salaries on the 29 schedules submitted, excluding the salary list submitted by one district, were also examined. Maximums for teachers with the bachelor's degree ranged from $1,860, the state minimum, to $2,544. Five districts met the state minimum only. The greatest frequency, represented by six districts, was a salary $2,300 to $2,399. Maximums were also examined for teachers with the master's degree. These maximums ranged from $1,956, the state minimum, to $2,724, exclusive of the district which had submitted a salary list only. In this district, one teacher's salary was listed as $3,300, two were listed at $3,000, and four were listed at $2,780. The greatest frequency, represented by seven districts, was a maximum salary of $2,500 to $2,599. These maximums do not include payments provided for factors other than training and experience which do prevail in some of the districts.

Factors for Salary Increases

The number of increments in the 29 usable salary schedules was also examined. These ranged from 13 to 25. In 15 districts, a majority of the cases, the increments were 16 in number which appears to be a definite reflection of the state minimum salary schedule. It is possible, of course, for a district to provide fewer than 16 increments and still comply with the law providing the increments are larger than the state minimum.

In all 29 of the usable schedules submitted training and experience were recognized factors. Increments for increased training stopped with the master's degree, or five years of training, in all but two cases. In these two districts a sixth year of training was recognized.

Factors, other than training and experience, did pertain in several of the schedules. In eight cases additional compensation was provided for special assignments such as double sessions in the first grade, coaching, music, and vocational subjects. Six of the districts made provisions in their schedules for the recognition of merit. In five cases additional salary was provided for teachers who were assigned to schools in remote parts of the district. Two districts used dependency as a factor in computing the salaries of teachers.

School-board skepticism of a salary schedule was reflected by qualifying clauses in three of the salary schedules. In these cases the boards reserved the right to increase or decrease salaries from those shown on the schedule. One wonders how such a provision can square with the legal stipulation that the board "prepare, adopt, and comply" with a salary schedule.

Results are Businesslike

While this analysis had admittedly been preliminary in nature, certain conclusions seem warranted:

1. The law seems to have provided many of the school districts of Utah a more businesslike and equitable method of determining salaries than the "horse-trading" techniques employed previously. The salary schedules formulated have been essentially of the "single salary schedule" type which is in accordance with the best theory in the matter.

2. The enforcement of the law has been somewhat lax. The state board of education has been given the clear mandate to secure the salary schedules by October 1 of each year or withhold the funds provided for in the legislation. Moreover, those schedules which do not comply with the law should be promptly rejected, and a satisfactory schedule requested.

3. In some cases the state department of education will need to assist certain school districts in drafting an appropriate schedule. This may require help in an analysis of the financial ability of the district, the rate of teacher turnover, and other basic factors as well in the formulation of the instrument.

4. This need for basic assistance is reflected in the conservatism of most of the schedules. The foundation program now guaranteed by the state amounts to $2,820 per classroom unit of 30 elementary pupils in average daily attendance. High school pupils are given a weighting of 1.5, and there is an additional allowance for transportation. With these figures in mind there seems no reason why the state minimum schedule should not be increased in all brackets by $400 or $500 per year.

5. As long as the word *comply* remains in the salary schedule law, the state board of education has the obligation to determine whether or not the schedules submitted each year are actually being followed. It would appear that districts should be required to certify that such is the case. Quite probably the pay-roll records of at least a few of the districts should also be checked each year to determine compliance with the law.

[2]Laws of Utah, 1945, p. 273.

The Future Farmers of America

Farm Boys Are Learning How to Become the Successful Farmers of Tomorrow in Practical Courses in Vocational Agriculture

*A. W. Tenney**

A new day is dawning for American agriculture and rural life. Through practical courses in vocational agriculture and membership in the Future Farmers of America farm boys in thousands of rural high schools are being trained in scientific farming.

To get a firsthand picture of the activities of these farm boys let us visit a typical department of vocational agriculture. Suppose we stop at Kalispell, Mont., for a visit with the teacher of vocational agriculture and the Flathead Chapter of Future Farmers of America.

The 79 members of the Flathead Chapter study vocational agriculture under the capable direction of H. E. Robinson, teacher of vocational agriculture. Mr. Robinson is well trained for his position. He has a farm background, is a graduate of a college of agriculture, and is a capable leader of boys.

What Flathead Chapter Has Done

As we go on a tour of the department with Mr. Robinson we are impressed with the well-equipped classroom where we find boys studying up-to-date farm practices. We visit the milk-testing laboratory. Here we are told that the F.F.A. chapter has organized a Dairy Herd Improvement Association. A total of 175 cows are included in the association which has resulted in higher production per cow and improved feeding practices. Chapter members do their milk testing in the school laboratory.

Next we visit the modern farm shop where we see high school farm boys busily engaged in the repair of farm machinery and the construction of farm equipment. Mr. Robinson informs us that chapter members repaired or constructed during the past year 85 large farm machines and pieces of farm equipment including such things as hay stackers, buck rakes, sawmills, electric brooders, self feeders, and hog houses.

We go on a tour to the chapter forest. The boys own co-operatively a 22-acre tract of woodland which they use to demonstrate the proper management of farm woodlands. The Soil Conservation Service and a pine association are co-operating with the boys in methods of handling and management in order to obtain a sustained yield and the greatest return from the land.

Do not go away for we have seen but part of the stimulating and educational activities that are provided farm boys who are studying to become the successful farmers of tomorrow.

Mr. Robinson takes us next to the chapter farm where the boys are taught many of the practical skills that cannot be learned in the classroom. The boys exhibit with pride the tractor which they bought and rebuilt in the shop. We learn that in addition to using it on their co-operative farm it is rented to chapter members for use on their home farms. We ask Mr. Robinson about the high-grade livestock we find at the farm. He tells us that the chapter has a livestock improvement program in operation which has increased the amount of livestock in the community and greatly improved the quality. We are told that the chapter has owned and handled on a revolving basis several hundred head of registered livestock. This revolving-ring livestock program is continuing to grow each year with the result that many farmers now have herds of pure bred sheep, dairy cattle, beef cattle, and swine that otherwise would not be in the community.

• Insignia of the F.F.A.

The chapter keeps several head of outstanding breeding stock for the use of members and farmers. This improved livestock has been a great stimulus to the Northwest Montana Youth Fair at Kalispell where this year 214 head of livestock and 450 entries of fruit, vegetables, grains, and shopwork were displayed. Fair day was climaxed with the Flathead Youth Festival which was co-operatively sponsored by the chapter.

Time will not permit a visit to the farms of the members, but we are interested to learn from chapter president, Donald Weaver, that chapter members carried out large farming programs last year while they were studying vocational agriculture. He states that chapter members averaged producing four agricultural enterprises each from which were produced more than $25,000 worth of products. The net worth of each student is $672.41. We are pleased to learn that 98 per cent of these members have full ownership of their farming programs.

It is not surprising to learn from Mr. Robinson that 165 farmers in the Kalispell community studied vocational agriculture since the course was first offered in the high school. We agree that here is education that is being applied in a most practical manner.

Chapter Members Have Good Scholarship Records

We ask if the boys find time to do anything besides farming and chapter work. The answer is that leadership training is stressed at all times and as a result twenty former members hold responsible offices in community organizations. The chapter holds regular meetings at night to transact chapter business and for recreational purposes. An average of 81 per cent of chapter members attended the eighteen meetings held during the past year.

We inquire about the scholarship of the group and find that it has not been overlooked. We are told that scholarship is stimulated by awards, by having "big brothers" for new members, and by holding special meetings on how to study. Such methods have proved very effective in improving the scholarship standing of chapter members.

We are reminded that chapter members also find time for some good clean fun. Last year they held a parent-and-son banquet with 150 people in attendance, held a picnic for the girls in home economics, played athletic games, and attended a summer camp at Bowman Lake in Glacier National Park.

In our brief stop at Kalispell with the Flathead Chapter we have seen typical facilities that are found in many departments of vocational agriculture throughout the United States, the Territory of Hawaii, and the Island of Puerto Rico. Equally interesting and stimulating activities are performed by other F.F.A. chapters such as Alpine, Tex., Albany, Ore., Hurricane, W. Va., Byron, Ill., and chapters in thousands of other communities that are providing training for the farmers of tomorrow in practical courses in vocational agriculture.

Studies that have been made of the occupations of farm boys who studied vocational agriculture indicate that approximately 65 per cent have entered the field of agriculture.

One Boy's Record

To see the influence instruction in vocational agriculture has had upon a farm boy, let us review the record of Gordon Eichhorn of Marion, Ohio. At the recent national convention of the Future Farmers of America, Gordon, a member of the Pleasant Township Chapter, was selected as the Star Farmer of the Future Farmers of America for 1945. He is 20 years old, is married, and is living in his own home. When he enrolled in vocational agriculture in 1939 he started his farming program with a sow, two steers, and 26 sheep. He expanded and improved his farming program to the point where he had, when he was graduated from high school, 50 hogs, 27 steers, 26 sheep, 2 dairy cattle, and 20 acres of wheat, soybeans, barley, and corn. He earned

*Executive Secretary of Future Farmers of America, Washington, D. C.

F.F.A. boys work at every type of farm repair and machinery maintenance.

a labor income of $1,549 from his farming program during the four years he was a high school student of vocational agriculture. Two years later he had increased his labor income from farm activities to $3,320. He supplemented this income by earning $1.558 by doing general farm work.

Gordon's present farming program consists of 60 hogs, 90 sheep, 1500 chickens, 52 acres of wheat, 67 acres of corn, 18 acres of soybeans, 26 acres of oats, 6 acres of barley, and 52 acres of alfalfa and clover. He has acquired farm equipment valued at $2,028, consisting of a tractor, cultivator, grain and hay harvesting machines, and numerous small tools.

As a result of his instruction in vocational agriculture Gordon was responsible for the introduction of many new and approved practices on the home farm. Some of the most important were the use of pure bred animals, liming of soils, control of stomach worms in sheep, rotation of pastures, and keeping and analyzing farm records. He made many improvements in farm buildings and facilities. Buildings were repainted, concrete floors were installed, and new fences were constructed.

At the present time he is operating the home farm. He furnishes all of the equipment, half of the operating expenses, most of the labor, and receives half of the income. He also manages and operates a 56-acre farm for a member of the armed forces and rents a 40-acre farm from a neighbor. Recently he bought a 10-acre tract of land and a house where he and his wife make their home. Gordon has a net worth of $8,315.79.

He was an active leader and participant in the activities of the local F.F.A. chapter while he was a high school student of vocational agriculture. He served his chapter as president, and as a delegate to the state convention. He took part in public speaking contests, parliamentary procedure drill, community institutes, junior fairs, scrap drives, chapter banquets, safety meetings, and officer-training meetings.

Gordon was also very active in high school affairs and in community work. Since being graduated from high school in 1943 he became president of the Young Men's Farming Club, secretary of the Farmer's Institute, a member of the Grange and Farm Bureau, and president of his Sunday School class.

When W. A. Cochel, editor of *The Weekly Kansas City Star*, presented the Star Farmer award to Gordon he said: "Since I have been reviewing the records of achievements of members of the Future Farmers of America for the past 18 years, I have been impressed with the fact that many of these farm boys make as much progress in 5 or 6 years as many farmers make in a lifetime."

History of F.F.A.

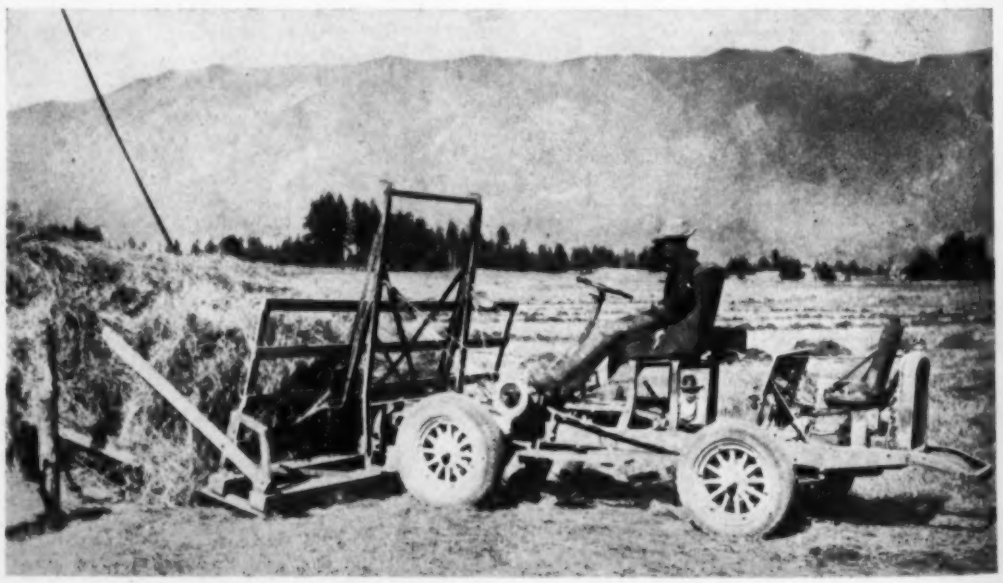
Federally aided courses in vocational agriculture under the National Vocational Education (Smith-Hughes) Act were first established in 1917. Courses are offered for high school farm boys, for young farmers not in school, and for adult farmers. Prior to the war classes in vocational agriculture were being taught in more than 9000 rural high schools. The program is administered on the national level by the Agricultural Education Service of the U. S. Office of Education and on the state level by the State Boards for Vocational Education. The program is financed on a matching basis by the Federal Government, the states, and local school boards.

From the beginning farm boys enrolled in high school classes were drawn together by a spirit of comradeship and a desire to pursue farming as a vocation. By 1928 the demand was so great that a national organization of these boys was formed and they chose the name of Future Farmers of America. A similar organization called the New Farmers of America has been organized by Negro farm boys who study vocational agriculture in separate schools for Negroes.

Membership in the F.F.A. has grown rapidly and it is now recognized as the largest farm-boy organization in the world. The foundation upon which the Future Farmers of America organization is built includes leadership and character development, service, sportsmanship, co-operation, thrift, scholarship, improved agriculture, organized recreation, citizenship and patriotism.

During the past three years the organization has possibly recorded its greatest achievements, going all out for the war effort, both on the home front and the global battle fronts, where thousands of members and former members have been fighting. Members of the F.F.A. at home have engaged in a wide range of activities, contributing in no small measure to the victory.

Members of the organization have been honored by a citation from the U. S. Treasury Department "for distinguished services rendered in behalf of the War Finance Program." This citation is the second given to the Future Farmers of America. Previously the War Pro-



A western F.F.A. boy operating his home-made power buckrake.

The Flathead, Mont., Chapter, F.F.A. at a monthly get-together.

duction Board gave a certificate to the organization "in acknowledgment of the meritorious services rendered in behalf of the National Scrap Harvest."

Buying war bonds and stamps was one of the outstanding achievements of the F.F.A. during the war. Chapters and members purchased more than $8,000,000 worth of war bonds during the past year. Money to pay for these bonds was earned by the boys from their supervised farming programs. In their home communities members rendered effective service by conducting bond drives, repairing farm machinery, constructing needed farm equipment, conserving food in school community canneries and by producing food for freedom. Future Farmers and their friends take justifiable pride in their wartime achievements.

Each year a national convention of the Future Farmers of America is held in Kansas City, Mo. Plans are being made for a great Victory Convention in 1946. It is anticipated that 15,000 boys will attend this meeting.

An Illinois boy, J. Glyndon Stuff of Dixon, is president of the national organization. Other national officers are: first vice-president, Sherman C. Beard, Jr., Garrardstown, W. Va.; second vice-president, Eugene E. Starkey, Orland, Calif.; third vice-president, Marion F. Baumgardner, Wellington, Tex.; fourth vice-president, Joseph E. Espey, Maryville, Mo.; student secretary, Virgil Getto, Fallon, Nev.; treasurer, Dowell J. Howard, Winchester, Va.; adviser, W. T. Spanton, Washington, D. C.; and, executive secretary, A. W. Tenney, Washington, D. C.

One of the forward steps taken during the past year was the establishment and incorporation of a foundation to promote the work of the F.F.A. A sum of more than $60,000 has already been contributed to the Future Farmers of America Foundation, Inc., by corporations and business concerns interested in agriculture. The purposes of the Foundation are to stimulate worthy achievement in leadership and farming by providing prizes and awards to students of vocational agriculture and to assist boys who have been trained in vocational agriculture classes to become established in farming.

Members of the Future Farmers of America are looking to the future with confidence. The practical instruction they are receiving in vocational agriculture and membership in the F.F.A. should lead to a new era of prosperity and service in agriculture in rural America.

The Recreational Program of the Cheyenne Schools

J. L. Goins[1]

Cheyenne School District No. 1 has cooperated with the county of Laramie, the city of Cheyenne, Wyo., and certain interested individuals and organizations in developing a recreational program for the youth of the city and surrounding territory.

Cheyenne is a city with a population of approximately 35,000 people. Many new people have come to the city during the wartime emergency. Younsters who came to the city were at a loss for recreational facilities so that juvenile delinquency became a serious problem. Meetings of interested citizens and officials were called and the question was discussed by various leaders and officials of the city. The board of education of School District No. 1 participated in these discussions and offered the school facilities during the emergency. The board has always held to the policy that school facilities be used as much as possible by patrons of the community.

The Cheyenne summer schools have been in existence more than twenty years. This program was expanded during this time to include many more activities than had been previously offered. The following activities were scheduled: remedial classes in academic subjects, supervised playgrounds, instruction in music, victory gardens, swimming, and the children's theater. The cost of this program has been approximately $20,000. About $10,000 of this money was contributed by the county, city, and school district; the other $10,000 was raised by contributions from organizations and interested individuals, along with fees and admissions to the different activities.

The summer school activities were conducted at six different sites. Regular academic and arts and crafts instruction was given at each of these sites. A total of 428 children were enrolled in the elementary schools and 222 in the junior-senior high school group. Twenty teachers were employed to care for these children.

The playground program was in operation at eight different sites. This program included the usual games suitable for younger children on playgrounds and in gymnasiums. Approxi-

[1]Superintendent of Schools, Cheyenne, Wyo.

mately four hundred children participated.

In addition to the free play and casual games, a softball league was organized, which included: 12 teams for boys under 12 years of age; 12 teams for boys from 12 to 17 years of age; 6 teams for boys over 17 years of age; 6 teams for girls 13 years of age and over.

Approximately five hundred young people participated in these softball games. Supervised instruction was also given in tennis and approximately one hundred people registered during the summer for this activity. A hardball league was organized in which four teams participated during the summer. One of these teams won the championship for the state of Wyoming in the American Legion tournament.

Three music centers were in operation during the summer. The instructors of instrumental music in the junior and senior high schools took charge. A total of 265 boys and girls worked at this activity. Special instruction was given in cello, violin, and the respective band instruments.

Victory Gardens were planted during the summer. A science instructor of the junior high school had charge of this program. He worked in co-operation with the county agricultural agent and had more than six hundred garden plots under cultivation. This program was climaxed at the end of the summer with a display. More than two hundred boys and girls displayed vegetables grown in their gardens during the summer. The Chamber of Commerce gave $100 in prizes to this group.

Regular instruction was given in swimming in the senior high school pool and at Sloan's Beach. High school instructors were used on this program. The younger children were taken care of for the most part in the senior high school pool, and more than five hundred boys and girls participated. The swimming at the beach was open to the public and several thousand people availed themselves of the opportunity offered. Sunday groups ranged from 1400 to 1500 people.

A Junior Boys (ages 10 to 12) Ball Team and mascot.

A Youth Canteen was organized and was in operation for the second consecutive summer. Approximately six hundred young people participated in this program at different times. This program was self-supporting, inasmuch as the children paid a small fee for the privilege of membership in the organization. Much of the credit for this activity should go to volunteer workers who assisted in the program.

The Children's Theater did an excellent piece of work during the year. Classes were opened in puppetry, creative dramatics, and dancing. Nationally known individuals were employed in the puppetry work. Some of the plays which the children gave were: Sleeping Beauty, Little Black Sambo and the Tigers, Silver Thread, Aladdin, and Jack and the Beanstalk. This activity was also self-supporting through its plays and from donations by individuals.

Duplications, of course, exist in enrollment under these activities, but it is safe to say that four thousand youngsters participated in the different groups. This program has won the respect of the community and will probably be continued. As a result of the work that has been done, interested organizations and individuals contributed approximately $10,000 during the past year toward equipment and improvement of existing playgrounds.

Girls are enthusiastic ball players and play as stiff a game as any boys.

NEW BUILDING PROGRAM IN HOUSTON

The board of education at Houston, Tex., has recently completed plans for a $7,500,000 school-building program for the school district, which anticipates the construction of three junior high schools, four elementary schools, and the complete renovation of all existing school buildings.

The building program calls for the addition of new lighting facilities for all buildings, the installation of drinking fountains, new plumbing and toilet facilities, and the repair and repainting of the interiors and exteriors of all buildings. In addition, new classroom space will be provided for present school buildings to take care of increased enrollments and the housing of special classes.

Forewarned Is Forearmed —

The School Board Member and Pressure Groups

Myron L. Koenig[1]

If democratic government must assume conflicts of interests, it must also assume that a peaceful adjustment of these differences is attainable without endangering the general welfare. Little of the web of American history has been more akin in both theory and practice to our democratic tradition than the public school and its administration. And few areas in which the American layman participates as a chosen representative of the people are as open to a constant barrage from pressure groups as are the members of local school boards. To adjust and balance the multitude of courteous requests, subtle suggestions, forthright demands, and anonymous threats without warping the general welfare is a task for Aladdin and (that symbol of modern education) his lamp.

The pressure group is usually a well-organized, energetic minority of the local populace which, by means of either an open or a whispering campaign (depending upon the motive or design of the source), will move directly toward the school board member to make its point most effective. In numerous cases, it bothers not at all about the indifferent majority, but because its course is directed, maintains a line of approach and attack toward the individual member or segment of members.

Most state school laws make clear that the superintendent is the executive officer of the school board. Pleas and pressures aplenty fall upon his shoulders — but that is expected — the superintendent is *the* professional executive of the board and his job is predicated on the assumption that such will be his lot. The board member, on the other hand, is seldom prepared by either experience, training, or warning for the assault that opens within the first month, or even week, following his pledge to the oath of office.

The board member usually maintains his own business, has his own daily round of responsibility, and expects blandly that the school-board experience will take but little more of his time and energy than the couple evenings per month on which the board assembles for officially scheduled meetings.

Whom Do Pressure Groups Concern?

If this article contains any merit, it should be directed principally to two groups: those who anticipate or who are "drafted" to run for the school board this spring, and to those numerous folks who will turn out to elect the successful candidates. These are the people who must weigh the responsibilities too commonly accepted as a rather secondary role in the annals of American local government.

It should go without the saying that the citizen who places, or is willing to have placed, his name before the public for possible election to a school board office should possess the fundamental characteristics of honesty, community interest, and a willingness to learn. To assume this, and thereby grant the benefit of the doubt in some cases, is the least we can do. But over and beyond these basic qualifications, the voter should insist upon voting only for the man or woman who has demonstrated the temperament and the willingness to listen — to listen with patience, to listen to all, to listen at any time and in any place. Should he be either unable or unwilling, by nature or circumstance, to lend his ear he will not be serving his school, his community, or his nation in a realistic manner. The school board member of the 1940's more emphatically than any board member in the earlier decades, must accept, weigh, and select his evidence — then translate his opinions into a vote in the best interests of the children and schools. These interests are not always apparent at board meetings.

The time granted a school system by the average lay board member is gratuitous to the extent that it is a real sacrifice of time from business and family, and that it represents an expenditure of nervous energy and experience that could be employed more pleasantly and with greater satisfaction in some other field. And yet, when the various pressures become white hot and the strain is full, that is the time when the board member must be more than ever ready to listen.

Petition a Fundamental Right

In America, the pressure group is a part of the very life of the country. It cannot be done away with — it should not. In many cases, it is legitimate, it is sincere, it is based upon the most selfless of motives. We may as well try to do away with the school boards themselves as with the pressure group. Do I hear a second to that motion? If so, what substitute could be offered to more clearly represent the desire and the right of the citizen to participate in the most vital phases of his government's work?

The board member, and those who elect him, must realize that much of the member's contribution as an official responsible for educational progress, will be in the role of tuning fork or barometer. And although the superintendent is the professional executive of the board, for numerous reasons inherent in human nature, the individual citizen often prefers to go straight to the board member whom he has — or claims to have — chosen. Possibly, the citizen does this because the board member is a neighbor, possibly because of a fear of the formal education of the superintendent, possibly because of the right and the pride in talking directly with "his" man.

Some Active Pressure Groups

The term "pressure group" may be subdivided into any number of types. For brevity and convenience, it will be well to note only a few general categories. There is, of course, the selfish group; they are the most dangerous. And yet one of the paradoxes to be experienced by the board member is the constant fact that many who either appear to or actually do represent a narrow cause, may have arrived at that point without consciously wanting to do so. Those who never consider themselves narrow or subjective are likely to be the most difficult of members of a group. Every community will have the old-line, established organizations which can be used as a fulcrum around which pressure groups may try (and often successfully) to hide themselves. But the most common pressure groups are those never suspected of being so — they rise and fall — but for every group that disappears, one or more new groups appear during the course of a year.

The pressures during the war and in these immediate postwar years were and will continue to be of more complex types than any of those which existed before 1941. The intricacies and ramifications of the depression years, of the New Deal, of the war proper, of the reconversion policies and tactics, are all causes and part and parcel of these new forces. The pressure group is likely to be in the school board member's own church, his lodge, his service club, his profession; among his neighbors and yes, even members of his own family circle.

The pressures to be accepted as a matter of course in these years are:

Insurance groups for the protection of the school property. Perfectly legitimate pressures, but time-taking and highly instructive to the layman

Chambers of Commerce for this, that, or the other community project of the day

The Parent-Teacher organizations in their honest zeal for a selected area within the whole school district

Veterans' organizations for the use of buildings or equipment

Farm groups, in rural communities, for letting school out early so the boys and girls can work on the farms during the spring plowing and planting season

Labor groups interested in textbook content and in the general point of view of the board member toward organized labor

It would be impossible for a year to elapse without the member facing one or more of these groups.

Some Perennials

In the war years, there were pressures from organized employers of labor to forestall the

[1]George Washington University, Washington, D. C.

opening of school so that the youth who had helped during the summer could continue to relieve the man-power shortage.

Medical and dental groups want more opportunity to participate in the school program (and well they could in too many systems).

The TB Associations want to use the schools for experimental proof that they can be of ever greater service to the community if so permitted.

The sports fans, that vast mob of normal, healthy Americans, who want a revision or a reconsideration of the coaching personnel, the schedules, the equipment, the seating capacity, the parking capacity, the exits, the prices, the umpires, and the referees — are not only active but vociferous in their demands.

The press, who want all the news, sometimes without consideration of the ethical decency demanded of the board member to hold vital information to himself, are troublesome but deserve to be treated with great tact.

The women's clubs are interested in scholarships, gardening, landscaping, and academic standards.

The men's service clubs, who have a project to start and complete — nearly one hundred per cent of the time for the real betterment of the community — sometimes are minus a consideration of all the problems involved.

The tax leagues; the state departments of public instruction; the city councils with their appendages; the fireman and the policeman; the playground commissions with their unquestioned need for space for directed play for the youth during the summer months; the various racial groups, as well as nationalistic groups desiring special considerations for religious services or financial or clothing collections — these are but a portion of what the member must listen to.

Another List of Pressures

Another list could well begin with the pressures regarding the vocational or the non-vocational high schools — particularly is this timely due to the revelations emerging from our war efforts. The question of replacement of servicemen and women on the teaching staffs has in some communities demanded aid from pressure groupings.

The Federal Government is in a sense a pressure group — exercising steady pressure to circulate literature, to establish clubs, to request speaking periods for the representatives of its departments and agencies — all for the purposes of these agencies.

The students can be pressure groups by way of direct petitions, or by way of parents. The custodians and the engineers can offer their share of pressure, and very practically too. And certainly not least, though last, the teachers act as pressure groups — this by the casual remark, the planned statement, the organized formal request, by the use of friends who are substantial citizens, or by simple, direct appeal.

The pressure group will present the facts alone — sometimes. More often it interprets the facts in a manner to help the member make up his mind as it wishes. The ideal board member does not exist — he would not be human. But inasmuch as he is by statute but one third, one fifth, one seventh, or one ninth of the board, and is in no sense empowered to speak or to act for the board collectively, he is nevertheless subjected to the vagaries and whims, the heartfelt opinions, and the one-track demands of America — pressure groups all.

The pressure group has one value that cannot be overlooked. It is inevitably the source of ideas, of suggestions for school improvement, of recommendations for changes in the amount and quality of school services, of demands for the betterment of the school personnel. The job of the board member is to consider every idea and demand with patience and judgment, to listen with an open mind, to sift the indifferent and the bad from the good, to eliminate the unworkable from the practical, and to harmonize in a democratic manner the entire setup and service of the schools for the welfare of the children.

The Instructional Council as Administrative Agency

Benjamin Klager[1]

One of the major problems confronting a school superintendent in a city of moderate size is to find ways of carrying on those administrative duties commonly performed by assistant superintendents in larger school systems.

If the superintendent in a city of fifty thousand population has the help of a number of assistants necessary to adequately supervise and direct the various levels of instruction, he is likely to find that he has expended a larger portion of the school budget than can be justified for administrative purposes. On the other hand, if he attempts to carry all of these responsibilities himself, he either will find it impossible to give adequate attention to these duties, or the schools are likely to function through administrative edicts.

In seeking a solution to this dilemma, the Bay City schools have set up an Instructional Council, which performs many of the jobs commonly assigned in larger school systems to assistant superintendents. The organization and functions of the Instructional Council and co-operating groups, as outlined in the present article, emphasize democratic procedures, divide responsibility, and tend to weld the entire school organization into a co-operative whole.

[1]Superintendent of Schools, Bay City, Mich.

The work of planning, organizing, unifying, administering, and supervising the instructional program of the Bay City schools is the joint responsibility of the (1) director of elementary instruction, (2) building principals, (3) department committees, (4) supervisors of special subjects, and (5) teacher study groups. The duties and responsibilities of the several groups have been clearly defined and it is the responsibility of the Instructional Council to co-ordinate the work of these groups.

The personnel of the Instructional Council includes the superintendent of schools, the director of elementary instruction, two high school principals, the dean of the junior college, and two elementary school principals. To this group have been added the supervisors of special subjects and the chairmen of department committees when the subject under discussion related to their particular fields of interest.

A brief outline of the functions of the different groups responsible for the instructional program is given here to provide a clearer picture of how the program operates.

The Instructional Council

The function of the Instructional Council is to review, evaluate, and co-ordinate the work of department committees, teacher study, and other groups to the end that each level of instruction functions as a part of the co-operative whole. Changes in policies frequently originate with the Instructional Council, and in all cases changes, suggested by other groups, are evaluated by the Council before they are adopted.

The Department Committees

In the Bay City schools, department committees are organized for business education, English, mathematics, homemaking, social studies, science, vocational training, health, and fine arts.

The chairman of a department is appointed by the superintendent of schools, following a review of the qualifications by the Instructional Council of the several persons available. The appointment is made for a period of three years, and reappointment can be made if the best interests of the schools are served by such reappointment. The regular teaching load of the chairman of a department is reduced and an additional increment of salary is granted for the added responsibility.

The chairman of a department must be a superior teacher, must have ability to work with other teachers in organizing the curriculum of the department, adequate training and experience in the subject field to command the respect of co-workers, and a sympathetic understanding of the pupils' viewpoint.

The department committee is made up of the chairman and one representative each from the junior college, the Central High School, the Handy High School, and one teacher from the elementary schools. Nominations for the committee are made by the dean, the high school principal, or the director of elementary instruction, and are approved by the Instructional Council. The committee members bring to the group the viewpoints, needs, and interests of their particular units, and their deliberations usually result in a well-balanced program in the subject field from the elementary level through the junior college.

The duties of the chairman of a department, in co-operation with the department members, include: (*a*) organization of the department personnel for the study of problems; e.g., courses of study, textbook selection, in-service training for teachers, and evaluation of pupil reactions and attitudes toward the instruction program; (*b*) assisting with the orientation of teachers who are new to the departments; (*c*) assisting with such administrative functions as department inventories, requisitions, care of equipment, and distribution of supplies and textbooks.

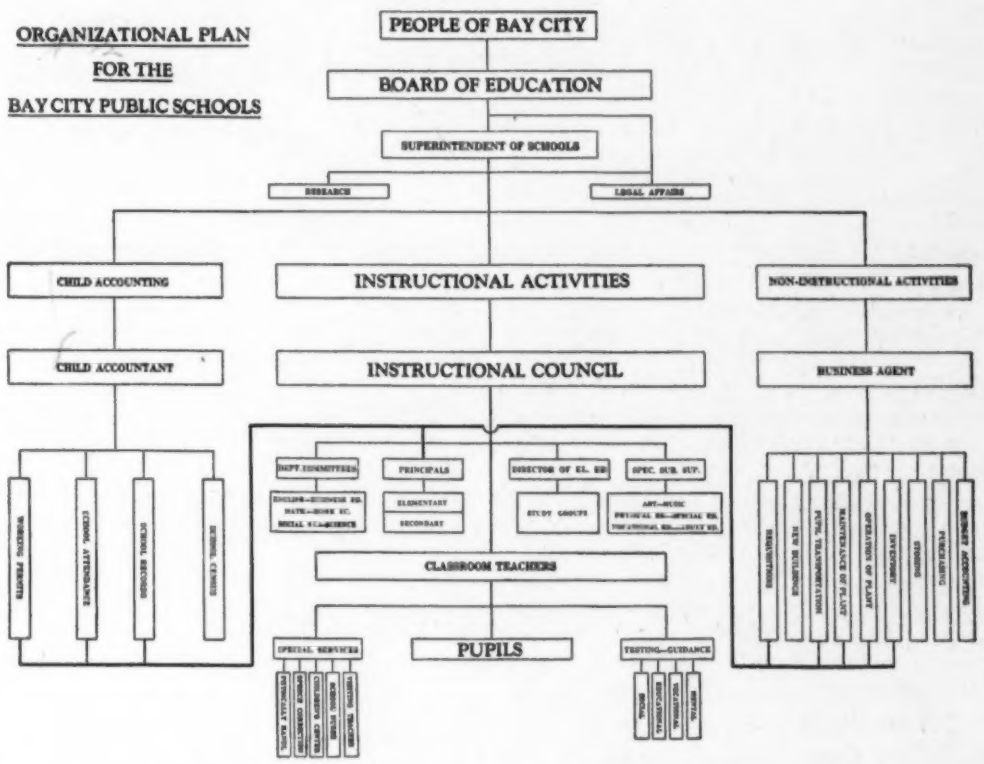
Each department chairman makes a brief annual report to the superintendent, and this report is reviewed by the Instructional Council. Members of the council are ex-officio members of the department committee and are notified of all department meetings. The members of the department committee work closely with the principal, dean, or director of the unit they represent.

The Principal's Work

The building principal is responsible for the over-all instructional program as it pertains to the building unit. His duties include administration, supervision, guidance, teaching, public relations, and necessary clerical work. As a member of the Instructional Council, he is familiar with the general policies adopted for the school system, and he brings to the council the needs of his unit. Within general prescribed latitudes he adapts the instructional program to the needs of his pupils, assists teachers with their instructional problems, interprets the purposes and needs of the school to the community, and in general directs all activities of the school to serve the best interests of the child.

The Director of Elementary Instruction

The director of elementary instruction, as the name implies, is in charge of the program of instruction in the elementary grades. She directs the activities of the study groups, evaluates teaching procedures and results in co-operation with the principals, studies the needs of the community and co-ordinates the work in the special subject field with the academic program. In many respects, her duties are similar to those of the chairman of a department, but they are more extensive and more inclusive. She works with the elementary school principals and as a member of the Instructional Council brings the over-all viewpoint of the elementary school to this group.



Special Subject Supervisors

The responsibilities of the special subject supervisors center around an adequate program of instruction in their respective subject fields and the methods of co-ordinating this work with the academic field and the development of the complete personality of the child. Special subject supervisors work closely with the director of elementary instruction, the chairmen of departments, and building principals. They consult with the Instructional Council regarding the co-ordination of their work in the over-all program of the school.

The Teacher Study Groups

The teachers in the city schools are key people in formulating the content of courses of study and standards of achievement. Through study groups, organized on the basis of grade level, the teachers plan and develop the general outlines for the various subject fields in the elementary school. They exchange ideas of method and presentation and relate to each other their experiences of pupil reaction and interest of value to the program. Objectives are defined and clarified, but methods are left largely to the individual teacher and the group of children under her direction.

The director of elementary instruction meets with each study group once each month, and the special problems are considered by the group. Frequently no definite conclusions are reached but guideposts for a common objective are set up, and an opportunity for co-operative thinking is provided.

The plan outlined above has the advantage of providing participation by a large number of the instructional staff. Teachers feel that they have had a part in determining the educational program, and there is no feeling that a program is being dictated or thrust upon them from the top. The plan affords an opportunity for a large number of leaders to become familiar with the over-all requirements of the school and tends to eliminate the various viewpoints and interests.

Considerable thought must be given to the plan by the superintendent of schools to maintain a real interest in the various groups; however this has not been a serious problem.

The accompanying chart shows the present organizational plan of the city school system.

THE EFFECTIVE TEACHER

Irwin O. Addicott[1]

1. Recognizes, understands and is guided by the fundamental growth needs of boys and girls in organizing learning experiences in the classroom.

2. Possesses clearly defined and worthy goals as a person and as a teacher.

3. Recognizes the importance of purpose or goal in the learning process. Helps children individually and collectively to develop constantly higher and worthier purposes.

4. Provides learning situations in the classroom which will promote democracy as a way af life.

5. Displays skill and artistry in using appropriate methods and materials of instruction in teaching.

6. Has an "unlimited willingness to help" children and secures their respect and co-operation as individuals and in groups.

7. Exhibits personal characteristics that will influence children in a positive way and so promote their growth.

8. Knows the community, is an active citizen in it, and uses its resources in enriching the learning process.

9. Evidences a warm and ready desire to co-operate with other teachers that the welfare of children may be promoted.

[1]Assistant Superintendent of Schools, Fresno, Calif., in "Staff Bulletin."

Let's Investigate —

Are Veterans Fit to Teach School?

Leo W. Jenkins, Ph.D.[1]

Although it is still too soon to make an extensive study of the number of veterans who plan to begin or to return to a career as a public school teacher, the trend seems to be away from such a choice. One of the chief contributing factors for this apparent lack of interest is the present relatively low salary schedules. Unfortunately, too, other highly significant factors are also present. I recently witnessed an interview wherein a splendid young ex-army officer with the appearance of an all-American football player was applying for a position in a senior high school for which he was legally qualified. He told the prospective employer that he had interviewed and trained several thousand army men during the past four years. The employer, resembling the man pictured in advertisements as needing those little pills, told the veteran that he lacked experience.

A Serious Potential Loss

It is difficult to estimate the tremendous loss to communities that are too ill informed or hesitant to appreciate and utilize the services of our veterans in their schools. In fact it will be one of America's great reconversion mistakes if the experiences in world travel, teamwork, science, craftsmanship, geography, and tolerance gained by our veterans are not made available to the nation's youth. A few shallow thinking administrators and boards of education are probably reluctant to hire veterans because they feel that the experiences of war are something to be forgotten and certainly not beneficial to adolescents. They may fear that they are inviting trouble for themselves by bringing incipient maladjusted people into their systems. They may remember having read stories of veterans who returned to high school as students only to leave by request. These cases are not typical and the persons concerned are generally high school boys playing a role created for them in the literature of a few apprehensive social workers. A relatively small number are genuine. In some instances these students have doubted the genius of their instructors but that, too, has happened since the dawn of history and has little connection with the war. Students, also, have frequently rebelled against the lack of maturity prevalent in several schools. These criticisms are of prewar vintage and should not be associated with the veterans alone.

Our ability to prevent or stay out of World War III with its impending nightmare results will depend greatly on the extent to which this generation can impart to future citizens the facts of the futility and rottenness of war. No one can deliver this message better than our present veterans.

[1]Lieutenant, U. S. Marine Corps Reserve; instructor, Montclair State Teachers College, Montclair, N. J.

The Problem of Certification

Probably the first obstacle confronting the employment of veterans is the question of certification. Although many veterans will not be able to satisfy the requirements for a teacher's certificate in some of our states, their experiences and training in the service are as adequate and generally much better than the information obtained at college courses in pedagogy now a prerequisite for teaching. State certification officials can very easily overcome this difficulty by evaluating in-service training in terms of educational courses and issuing limited teaching licenses that could be made permanent on recommendation by the school principals after a trial teaching period of one or two years. The risk is not great, for few teaching situations can possibly offer more problems requiring immediate solutions than those confronted by the officers and enlisted men whose instruction gave America the greatest army and navy in the world. I recall a young major teaching a class of approximately eighty men in the intricacies of demolition work. The class was held in an open field during a heavy rain. Time was not available in 1943 to postpone the instruction. The lesson, although much more complicated than that found in any high school science class, was well presented and fully mastered by the students. The armed forces had thousands of teachers as capable as this officer, but only a very small percentage of them will ever become associated with our schools. The criticism will naturally be raised that instruction in the service was compulsory, and men merely appeared interested to avoid punishment while public school teaching is much different. True as that undoubtedly is there still remains the splendid record of the off-duty educational program through which thousands of men received instruction in voluntary classes. The Third Marine Division, for example, had 8000 men taught in over 50 different subjects. In many instances these men sacrificed recreational and rest time to attend classes. Since this work was on a completely voluntary basis, instruction of necessity had to be good to continue to attract the men as it did. This performance was multiplied many times over by our armed forces throughout the world.

Realism in Our Schools

Numerous leading educators have advocated travel for teachers of social studies and foreign languages. A few well-situated school systems grant sabbatical leaves for this purpose, but they are in the minority. There is good reason for the desirability of having teachers travel in order to learn more about the peoples and countries they attempt to interpret to their students. Some of the present instruction in our high schools is antiquated and misleading because teachers lack firsthand information in the subjects they teach. Geography, for example, often appears to be of the tourist guide book variety. Many of our G.I.'s who were the products of this type of instruction were surprised at not seeing hula dancers along the streets of Hawaii. They were likewise disillusioned at finding the Pacific Islands anything but romantic. Educators will blame Hollywood for this misinformation, but what have they done to correct the misconception? It is obvious that with present salary scales there will not be much postwar world travel by the members of the teaching profession. The veteran has this experience behind him. Also he has seen much more of the peoples of the world than can be seen through the eyes of a "conducted" tourist.

Schools have been accused frequently of departing from the ways of realism. Unfortunately this criticism has been justified in many cases. A wholesome influx of veterans as teachers would go far toward bringing realism into the schools, for most ex-service men, whether they have been in combat or not, have been exposed to enough struggle to be highly realistic.

Most youths are hero worshipers and respect people who have done things. Typical discipline problems would be practically eliminated in a class taught by an ex-Marine, a paratrooper, a flyer or an infantryman. A reluctance at appearing ridiculous in the eyes of such a teacher rather than fear would cause most high school students to conduct themselves properly.

Raising the Status of Teaching

The appearance of veterans in the classrooms will provide a tremendous impetus to the citizens and the press of many communities to invest the teaching profession with the dignity which it deserves. The social status of teachers has been fixed too often by the unconscious use of the adage which holds that those who can, do; while those who can't, teach. This attitude has been one of the disastrous factors which has caused the present low salaries. Anyone familiar with the ingenious achievements of the men in our armed forces will readily admit that G.I.'s don't fall into the category of those that cannot do things. In this connection it is obvious also, that false-economy-minded school boards and unco-operative communities will have to make a few changes in their present policies in order to obtain and hold ex-servicemen as teachers. This realization may prove to be the stimulus needed by such communities for bettering the status of school executives as well as teachers.

Almost every school system is bothered by a few citizens who, having insufficient courage or cause to complain to other municipal agencies, take their truculence to the school and nag the teacher. Most veterans would make short work of these pests upon the initial encounter with them.

Like the weather, everyone talks about tolerance, but no one seems to do anything to remedy our failures to practice it. Veterans cannot be expected to crusade for tolerance because they have witnessed much intolerance wherever they have gone, even on the battlefield. But at the same time they have lived and fought with enough men of all faiths and nationalities to know that most stock phrases of hate and claims of superiority are foolish and based on unsound foundations. The lessons they have learned will do much toward making future citizens more tolerant.

Veterans are much more nationalistically minded than the average teacher who has not been in the service. They have visited and lived in practically all sections of the country. In fact, they have become a definite part of the community life throughout the nation. They know how the other fellow lives, for their acquaintances are from all corners of the land. It seems that every serviceman knows someone from Texas, California, New York, or whatever state one cares to name. Provincialism has "gone out the window." This broad viewpoint should go far in bringing about a desire for and action toward obtaining a greater degree of equality in educational opportunity. It should also rouse some of our communities from their complacent acceptance of inferior school systems and indifferent teaching staffs.

An Easy Process

Throughout the nation the machinery is set up to make the employment of veterans in schools an easy process. Vacancies can be listed with the local draft boards or very much effectively with the Veterans' Administration guidance directors. In the latter case employers can satisfy their desire to obtain people from outside of their own communities. There are enough veterans available to fit practically every type of vacancy regardless of the qualifications required. Often many strange combinations of qualifications are genuinely needed. A man who can coach football and play an organ may be difficult to find under the present methods of seeking teachers. The vocational guidance directors of the Veterans' Administration, however, would have little difficulty finding people with any apparently unrelated abilities.

Boards of education would be showing wise judgment also if they considered veterans for school administrative positions. More than one school system is now stifled by moss backs in its administrative offices. A veteran of field officer rank or one who has had a responsible position in the educational or administrative sections of the armed forces has the drive and ability needed for a good administrator. He has faced and solved problems much more complicated than those associated with running the average school.

Finally, it must be borne in mind that communities will not only be doing a patriotic duty by seeking veterans to teach, but they will be doing a primarily valuable service for their own youth. Now is the only time this opportunity will be available to schools. Many veterans who are now anxious to begin new careers in education will not care to do so after they get started in another field.

Attacking the Child Accident Problem

*Howard G. Danford, Ed.D.**

United States war casualties from Pearl Harbor to V–J Day were 261,608 killed and 651,911 wounded or missing. Killed by accidents on the home front during this war period were 355,000. Approximately thirty million others were injured, 1,250,000 of them permanently disabled.[1]

As a nation, we look with horror upon the casualty lists of war and with relative unconcern upon the accident record of killed and injured, a record so imposing as to constitute a national disgrace. It is an amazing paradox that a nation which willingly sacrifices the lives of thousands of its young men and billions of dollars to provide a greater degree of international safety should view with apparent apathy the tragic and needless loss of life which occurs as a part of the process of daily existence in this country.

The public schools, of all institutions in America, should be most aware of the accident situation and most intelligent in their attack upon it because it is basically an educational problem. Instead, the schools too often mirror the national unconcern and frequently lag far behind industry and various other groups in the fight against accidents. Proof of this is clearly evident to those who wish to see it. It is to be found in the failure of teacher-education institutions to prepare teachers for the teaching of safety education; in the failure of administrative officials to demand that teachers be prepared to teach safety and to give them all possible assistance in their teaching programs; in the almost complete ignoring of the accident problem and its educational implications at conferences and conventions of teachers and administrators; in the absence of a well-planned program of accident prevention particularly at the secondary school level; and in the failure of school people generally, to keep a record of all pupil accidents, to study these data, and to establish preventive measures based upon these studies.

An adequate accident reporting system is a significant yardstick of the development of a school's program of safety education. Apply it to the nation at large and what do we find? A recent study of 250 schools and school systems in 31 states disclosed that less than half of the senior high schools had an accident reporting system and that only 38.1 per cent of the school districts in communities under 10,000 population kept a record of their accidents. Since this study included only schools and school systems recommended for their good work in safety education the figures for the nation undoubtedly are much lower.

Although many other factors are involved in an adequate school safety program, it is the purpose of this article to discuss only that of accident accounting and its corollaries, data analysis, and recommendations based upon the findings. In order that the article may have practical value it will deal with an actual situation, the Madison, Wis., public schools and their reportable accidents during the 1944–45 school year.

The reporting of all school-jurisdiction accidents requiring first aid is mandatory in the Madison schools. The only exception is in the interscholastic-sports program where only those accidents are reported which require either a doctor's attention or absence from school. The form used for the reporting of accidents is that recommended by the National Safety Council.[2] Enrollment during the year was:

	Elementary	*Junior High*	*Senior High*
Girls	3101	1219	1552
Boys	3228	1276	1334
Total	6329	2495	2886

The Findings

1. The schools reported 593 accidents of which 219 required the care of a physician or resulted in absence from school. There were no fatalities.

2. Five boys were injured for every four girls.

3. The junior high school was by far the most hazardous age. With approximately 21 per cent of the enrollment, it had 47.2 per cent of the accidents.

4. More accidents occurred in the gymnasium than in any other place, 26.3 per cent of the total.

5. Thirty-six per cent of all accidents involving elementary school children occurred on the

*Director of Health, Physical Education, Recreation, and Safety, Madison, Wis.

[1]Report of the National Safety Council.

[2]Copies of this form may be secured from the National Safety Council, 20 North Wacker Drive, Chicago, Ill.

playgrounds, and 57 per cent of these accidents occurred in unorganized activities.

6. More boys were injured in football and basketball than in any other activities; more girls were injured in walking.

7. About 43 per cent of all accidents were attributable to play or physical education.

8. Falls led all other types of accidents with 24 per cent of the total.

9. The most hazardous hour of the school day was from 10 a.m. to 11 a.m. for elementary school pupils; for junior high, 12 to 1 p.m.; for senior high, after 4 p.m.

10. Girls were most frequently injured in the ankle or leg and boys in the head.

11. Bruises and strains led all other types of injuries.

12. October, with 89 injuries, was the most hazardous month, followed by February with 88. Almost 30 per cent of all the accidents occurred during these two months.

13. Approximately one of every three accidents was caused partially or entirely by another person.

14. The number of accidents involving kindergarten children was relatively low; was about the same in each of grades one to five; increased greatly in the sixth grade; mounted to a peak of 94 in the ninth; dropped abruptly in the tenth and eleventh; and spurted again in the twelfth. This pattern was identical with that of preceding years in all major respects.

RECOMMENDATIONS FOR REDUCING ACCIDENTS

A study of this nature has value only if somebody *does something about it*. A doctor's diagnosis has value provided it reveals something about the nature of the patient's ailment and is followed by a prescription based upon the diagnosis. The following recommendations, for the most part, are based upon the findings of this survey and are designed to reduce the toll of accidents to Madison school children. The educational objectives inherent in these recommendations are coordinate with the strictly safety objectives.

Elementary and Secondary Schools

1. Accept the point of view that all accidents have causes and that no accident occurs by chance. There are no "accidental" accidents. An accident is simply evidence of a lack of control over oneself or one's environment. Someone made a mistake. For example, every time a boy is injured in a game some error has been made. Perhaps the equipment was at fault, the instruction inadequate, the conditioning period too brief; or the boy lacked skill, or the officiating was poor, or the opponent played unfairly. Just as there can be no disease without a specific cause, although that cause may be as yet unknown, so can there be no accident without a specific cause or causes. To say that "accidents will happen" and there is nothing we can do about them is as unscientific as to say that smallpox will happen and we can take no preventive measures. One of the outstanding characteristics of man's development on this earth has been his increasing control over his environment. He flies in the air, sails under the sea, circles the globe with his voice, conquers drought with vast dams, and now has harnessed atomic energy. Accidents have no place in such a world. When man was at the mercy of his environment accidents were a part of the scheme of things. Now they are out of place.

It is both a moral and a legal responsibility of the schools to determine the causes of accidents and to eliminate these causes.

2. It is advisable to make a spot map showing the location of the accidents occurring within each school building. After determining these areas of greatest hazard, establish measures designed to prevent accidents within these areas. For example, a school might find that many accidents within a year or two have occurred on a certain stairway. Investigation may reveal an inadequate light, a slippery or broken step, that children run down the steps, or other equally hazardous factors. The making of such a spot map would be a splendid project for a class in social science.

3. The principal is urged to appoint an accident investigation committee in his school. This probably should be a subcommittee of the school health committee. It might be well to have student representation on this committee. To this committee every accident is a challenge in somewhat the same way that an unsolved crime is a challenge to a detective. If a girl falls on the stairs the committee seeks the answer to these questions:

1. Why did she fall?
2. Was there congestion on the stairs?
3. Were the steps slippery?
4. Was the stairway properly lighted?
5. Should we have a stairway patrol to regulate traffic?
6. Was the girl running?
7. Did she have time to get from one class to another?

Accident analysis followed by appropriate recommendations can be a vitally interesting game and can make a great contribution to the safety program of any school.

4. It is a primary duty of teachers of physical education to emphasize correct techniques, proper conditioning, safe play areas, adequate protective equipment and supplies, the use of student leaders, and other measures which have proved effective in the reduction of accidents. Teachers should remember that more than four of every ten accidents to Madison school children occur when they are engaged in play or physical-education activities. We want our children to engage in certain types of relatively hazardous sports and games because much of their appeal and value lie in these hazards. However, there is no merit in being injured. Success is measured in terms of one's ability to meet these dangers and master them, not in becoming a victim of them.

5. It is advisable that the pupils be given a considerable share in organizing and conducting the program of safety education by providing for the development of pupil safety organizations. The safety patrol in the elementary schools is an outstanding example of this type of organization.

The greatest problem confronted by the school administrator in the establishment of a program of safety education is the problem of securing the co-operation of the pupils. It is futile to expect significant results in the development of pupil dispositions toward safety unless they are interested. Pupil interest is very closely tied up with pupil activity in planning and initiating any school program.

Therefore, it is recommended that both elementary and secondary schools set up student safety councils. The safety council may be a committee of the student council where such councils are now in existence. Both playground and corridor patrols have proved to possess great value in many schools. In view of the number of accidents in the corridors and on the stairs of the junior high schools, it would appear that corridor patrols might serve a very useful function in these schools. Playground patrols in elementary schools seem to be desirable.

Many secondary schools in other cities have established street patrols because of their hazardous locations. Since secondary school pupils may feel they have outgrown elementary school organizations, many schools have called their patrols by such names as "guards."

6. Since many accidents are the fault of pupils other than those injured, emphasize the responsibility each child has for the safety of all others.

7. Principals should insist that at least two teachers in elementary and four in secondary schools be qualified to render first aid. One or more of these teachers should be in the building at all times when pupils are present. They should be especially skilled in handling the types of school injuries.

8. Screen hot pipes and radiators wherever their existence constitutes a hazard to pupils. No child should be exposed to this type of hazard in a modern school building.

9. Every effort should be made to alleviate the slippery floor conditions which exist in some of the school buildings.

Elementary Schools

1. Emphasize as an integral part of the child's education the safety materials included in the Course of Study in Safety Education. Supplement with other available materials.

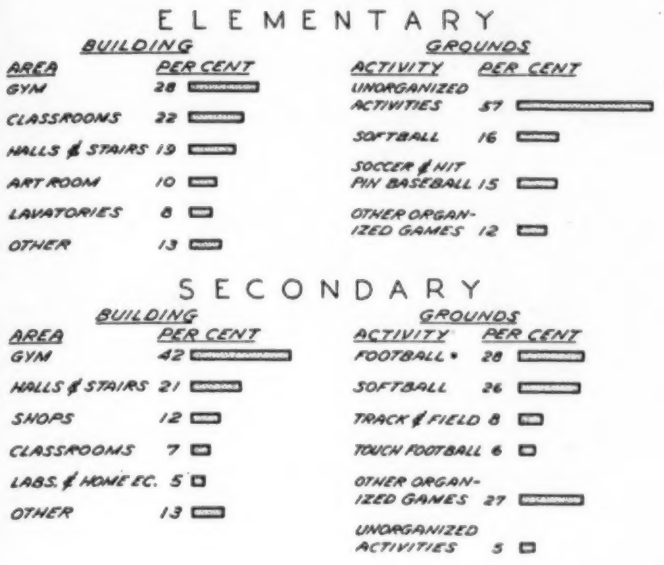
2. Provide at least one teacher *on the grounds* for the supervision of children during recess play and at noon if children are permitted on the grounds. Ideally, every teacher should go out on the plaground with her class at recess. Supervision through a window is not adequate from the standpoint of accident prevention. Studies have shown conclusively that as the degree of supervision is increased accidents are decreased.

3. Strengthen both protective and educational measures in the sixth grade to counteract the trend toward a rapid increase in accidents at this level.

4. Emphasize skill and judgment in walking under all types of conditions, such as on the stairs, on icy pavements, with umbrellas, and along aisles. Remember that just plain walking results in more injuries than any other single activity.

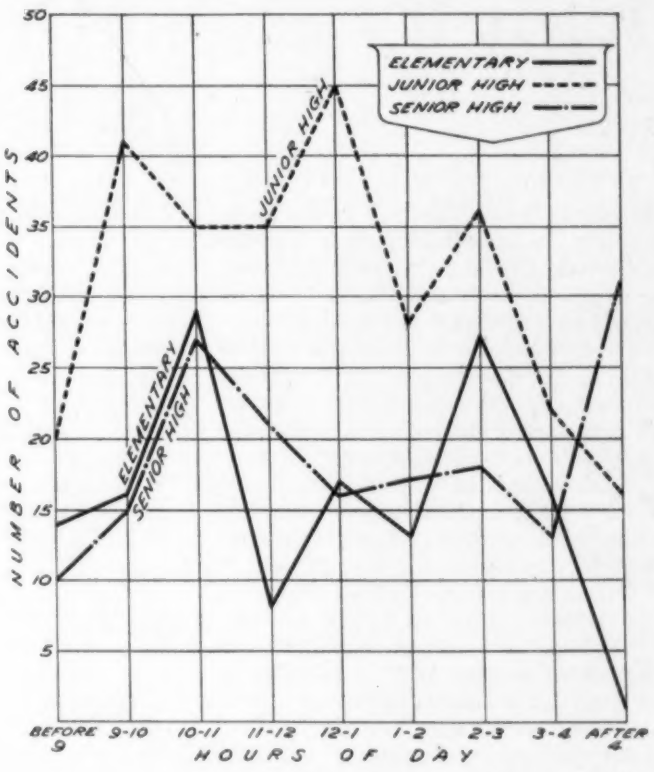
5. In physical-education classes, teach children how to fall without injuring themselves. Remember that falls lead all other types of accidents. If children are going to fall let us teach them how to fall.

Where Accidents Happen in Madison Schools



*In the interscholastic athletics, only those injuries are reported which require a doctor's attention or necessitate absence from school of one-half day or longer. In other instances all accidental injuries necessitating first aid are reported.

When Accidents Happen to Madison Children



6. Teachers and pupils should plan and conduct carefully their recess play. It should be remembered that 57 per cent of all elementary school playground accidents occur in unorganized activities. Such planning should include choice of activities in terms of available space and should result in the elimination of congestion on playgrounds. Principals may find it necessary to stagger recess periods to provide sufficient space for desirable activity programs. Small children should not be permitted to play near older pupils engaged in such games as soccer or softball. If all children have their recess at the same time, the younger children should be segregated in their play from the older.

Secondary Schools

1. Provide a planned program of safety instruction partially by correlation and partially through the medium of a special subject with safety education combined with first aid and health education.

2. Enlist the support of youth in the campaign against accidents by bringing them into the planning. Establish safety committees on the student councils and allow them to initiate and carry through a number of vital safety projects some of which they will suggest while others may be secured from the Division of Safety Education.

3. Organize corridor patrols to help reduce the number of accidents in the corridors and on the stairs especially among junior high school pupils.

4. Emphasis in girls' physical education classes should be placed upon the proper way to hold the hands when catching a softball or basketball, or when passing a volleyball. In Madison injuries to the hands rank second among girls, and in 1943–44 ranked first.

5. All junior high school teachers should realize that almost half of all the accidents to school youth in the city schools occur to pupils under their supervision. They should be especially alert to prevent accidents and to teach youth better control over themselves and their environment.

6. Football coaches should be particularly careful to see to it that the boys are properly taught and conditioned, adequately outfitted with protective equipment, and provided with good officiating.

7. In view of the large number of accidents among junior high school pupils during the noon hour, 12–1 p.m., the possibilities of further developing a well-organized and supervised noon recreation program deserves investigation.

8. The frequency with which scuffling or fighting appears as the activity in which youth were participating when injured, especially among junior high school boys, suggests the possibility of more adequate supervision and an activity program sufficiently vigorous and challenging to absorb more of the energies of these boys.

The schools of America must begin to give more than lip service to safety education. The expression of a pious hope that children will be more careful is not enough. An intelligent, co-ordinated, aggressive attack must be made upon the accident problem if tangible results are to be achieved. A school which keeps no accident records, does not know where, how, why, when, nor to whom its accidents occur, is like a blindfolded boxer who strikes at, but seldom hits, his opponent, because he has only a vague idea as to his location. Medical science has progressed largely in direct relationship to its ability to isolate causes and discover specific remedies. A similar mode of attack must be launched by the schools upon the problem of children's accidents.

DEMOCRACY AND THE TEACHERS

If teachers educate the children and youth of today so that the adults of tomorrow will be ignorant of the past, undisciplined because they have never felt the force of a moral code, and irreverent because they have been taught to concentrate always upon the immediate present, the foundation will have been laid for the destruction of our democracy. *"The American Democracy of tomorrow will be determined by the teachers and the school programs of today.* **There will be no democracy if we teachers, paid employees of the state, prove ourselves disloyal to it and pave the way for Communism (of Stalin or Trotsky), Nazism, or Fascism. Under any one of these forms of government we are assured of having a debacle similar to the one existent in Europe today, a situation before which the world stands horrified. It can happen here. The responsibility of preventing such a situation and of continuing our form of representative democracy rests fundamentally upon the schools and the teachers of America." — *Milo F. McDonald.***

COURT REFUSES TO BAR RELIGIOUS CLASSES

The Champaign County Circuit Court, at Urbana, Ill., has declared that the plan of religious education in the Champaign schools is legal. The decision was given by three judges of the Illinois Sixth Judicial District, who found that no constitutional or statutory rights of the complainants had been invaded.

The mandamus suit to halt religious education in the Champaign schools was begun last September, by Mrs. Vashti McCollom, self-styled atheist, who asserted that her 10-year-old son was embarrassed and ridiculed for being the only pupil in his class not participating in religious education classes. The case is likely to be appealed.

Facts for Determining —

What It Costs to Operate That School Bus Fleet

M. G. Pattington[1]

It is extremely important that some idea of costs of transportation be known by a school district before going into that important phase of our present-day educational program. Many formulas have been tried and great difficulty has been experienced in arriving at a definite cost item so that districts may know definitely what it will cost them to enter into district transportation using district-owned equipment, over varying sections of the country.

In planning the cost of a fleet of buses many items need to be considered, starting from the building of an adequate garage, securing the services of a mechanic, whose salary incidentally will be repaid many times over by the care and service he can give the buses, to the actual purchase, operation, and maintenance of the bus fleet itself. With a fleet of buses below eight in number the services of a part-time mechanic will probably be sufficient. The part-time mechanic can also serve as a driver on one of the shorter runs. In this way more money may be paid and the services of a better qualified man thus be secured.

Pupil transportation had its start in the consolidation of rural schools. Massachusetts first legalized it in 1869. Ohio had the first school consolidation in 1892, including transportation. By 1898 all counties in Ohio made it legal. In general the courts have separated transportation from school administration, thus leaving the provision of transportation up to state statutes. Nearly all states, however, now realize its importance in the well-rounded school program of services.

Around the year 1923–24, when first statistics were available, about 838,000 pupils were carried at an expenditure of nearly thirty millions of dollars or an average cost of about $36 per pupil. In general, studies and surveys show that greater safety and less expense are found in district-owned buses, as well as greater control leading to better administration. A study in Ohio for 1936–37, by Hutchins, gave the cost of private-contract buses as about 1.55 times the cost of district-owned buses, and present figures support this earlier survey, although latest New York State surveys indicate the lower ratio of 1.47,[2] and the present tendency is to carefully check on contract amounts, thus reducing the ratio.

A careful planning of routes, avoiding shoestring trips wherever possible and utilizing circular routings, will cut the cost item. A few days spent with a scale map, going over proposed routes and checking mileages with a map meter, locating pupils' homes, etc., will often aid in greater savings. Following this and in conjunction with it, trips over the routes, carefully checking grades, danger spots, turn arounds and crossings, will all contribute to better transportation administration.

Many schools, once their bus routes are established and in operation, make up a map showing all routes (using different colors to distinguish various routes or buses) and colored pins for the location of pupils. Varied colored strings drawn over these pins lead to flexibility and permit easy changing of a bus or route. During severe winter months the district can often save money and ease the strain on larger buses by providing feeder routes on the hard-to-travel side roads. A few miles of bad going will often cost more in wear and tear on the large bus than the few hundred dollars spent for a car.

The question of adequate insurance should be taken up with a competent bus-insurance agent. In general, property damage and public liability, compensation on drivers, and fire insurance are the main items to be considered. Compensation insurance on the bus itself is often too expensive to justify its being taken out, although for a new fleet which travels bad roads there is something to be said in its favor. A minimum of $5,000 property-damage insurance should be carried on all buses. Buses with capacities from 1 to 8 passengers should have a minimum of $10,000 to $50,000 personal liability; 9 to 30 capacities, a minimum of $10,000 to $100,000; and 31 or more capacity, a minimum of $10,000 to $200,000. These are minimum figures as established by New York State regulations, and higher figures at a slight per cent increase in premium costs are often advisable. Most insurance companies will allow a lower premium rate for bus fleets consisting of over five buses, and in general 10/12 of the annual premium may be secured for the ten months that school is in operation, plus a small amount (about $3) paid for the privilege of testing the bus on the road in the summer. This matter should be carefully taken up with the agent and included as a rider on the policy to protect the district. The slogan "Read Your Policy" is as applicable to board members and principals and to bus insurance as it is to other individuals.

The following bus costs[3] are determined on the basis of the average bus built to last approximately ten years. Quality of chassis and body, section of the country, influence of wartime price carry-overs will, of course, cause variations.

TABLE I. BUS COSTS

Passenger size	*Original cost*
9	$1,350
12	1,850
21	2,500
31	3,250
43	4,500
49	5,200
55	5,750
61[4]	

A common practice is to pay for the bus over a period of five years through notes, and buses listed on the above price schedule and given proper care can be expected to last double that time. In this way a district can spread its cost of purchase over a five-year period when the buses do not require too much servicing; during the last five years of life the districts will thus have more money to spend on repairs and maintenance items, to replace defective or worn-out equipment, and to plan on buying new buses.

In considering the cost of the bus garage, war prices, of course, make the present estimates very high. However, when prices are at normal, the price per stall is estimated to be around $2,000, to include toilet, bus washroom, pit, and heating plant. Eight-stall garages before the war were built at a cost of $12,000 minimum, where heating could be piped from the main school plant.

One New York Central School District[5] built an eight-stall garage for $12,000, including all costs, and financed the same by 12-year certificates of indebtedness, paying 2.5 per cent interest. The average cost over a 12-year period was thus $1,125 per year, a cost item comparing very favorably with the price paid for former bus storage alone.

Many districts find that it pays them to mount a scraper blade on an old car chassis to use in cleaning out the cement ramp in front of the garage and the school driveways and walks. This scraper can oftentimes be built in the school shop, and the man hours of laborsaving through its use will repay the initial cost in a short time.

Equipment figures vary widely, but in general an initial minimum outlay for equipment of $500 will satisfactorily take care of servicing a new bus fleet and each year extra items may be added. In planning garage equipment suitable work benches are an essential, both wood and metal, and the 12-foot size has been found to be most suitable for the ordinary school-bus garage. The garage should have two machinist vises, a steel tool cupboard, steel storage and small parts cabinet, and containers

[1]Assistant Educational Supervisor, New York State Department of Education, Finance Division.

[2]University of the State of New York, Bulletin No. 1149, "Transportation in Central Districts."

[3]Information on bus costs supplied from tables of estimated bus-purchase costs, furnished by Burton H. Belknap, Supervisor, Transportation, Bureau of Field Services, Finance Division, New York State Department of Education.

[4]New York State no longer approves this size for purchase and it is doubtful that a larger size than the 55 passenger bus is suitable or practical on account of lack of flexibility.

[5]Chenango Forks Central School, Chenango Forks, N. Y.

TABLE II. SAMPLING OF TRANSPORTATION COSTS

District	No. buses	Average size	Average daily miles	Operating cost per mile	Per pupil (operating) cost per year
A	1	55	52	18.4¢	$13.01
	Carries 130 pupils 9187 miles a year Drivers' salary — $800 Total operating cost — $1,691.92 (No principal or interest payments on bus)				
B	3	30	63	17.6¢	$33.01
	Carries 171 pupils 32,130 miles a year Drivers' salary — $700 average Total cost — $7,648.22 Less — 2,003.55 (principal and interest) $5,644.67 Net operating cost				
C	4	24	27.5	22.9¢	$75.78
	Carries 69 pupils 22,840 miles a year Drivers' salary — $718 average Total cost — $6,821.46 Less — 1,592.49 (principal and interest) $5,228.97 Net operating cost				
D	4	37	35.4	21.9¢	$48.66
	Carries 118 pupils 26,159 miles a year Drivers' salary — $750 average Net operating cost — $5,742.16 (no principal and interest payments)				
E	5	49	44.2	20.5¢	$38.71
	Carries 212 pupils 40,081 miles a year Drivers' salary — $800 average Total cost — $11,074.93 Less — 2,867.94 (principal and interest) $ 8,206.99 Net operating cost				
F	7	44	30.8	19.9¢	$24.38
	Carries 300 pupils 37,695 miles a year Drivers' salary — $750 average Total cost — $12,837.93 Less — 5,352.30 (principal and interest) $ 7,485.63 Net operating cost				
G	14 (including 2 part time)	35.5	42.8	17.5¢	$26.99
	Carries 709 pupils 109,130 miles a year Drivers' salary — $750 average Total cost — $30,509.25 Less — 11,374.20 (principal and interest) $19,135.05 Net operating cost				

for the greatest capacity of oil needed by any one motor. The fleet of more than four buses will require a gasoline tank of 1000-gallon capacity. An air compressor, heavy-duty chain-repair outfit, bench grinder, electric drill, powerized air-line lubrication outfit, battery charger, electric tire-tube patching outfit, eccentric valve reseater, grinding refacer, wheel-puller tool, floor creeper, bolt cutters, welding outfit, hydraulic car jack and brake-lining machine are among the more permanent types of equipment to be considered. In the line of motor tune-up equipment a wide variety of outfits is available as single units or individually, to be determined by the amount of money and the size of the fleet to be handled. The articles listed are far from complete, some will not be needed in the small starting fleet, and some will have to be added. The size of the fleet, the money available to buy new or good used equipment, and the prevailing prices will determine the items to be purchased.

In the question of drivers' wages, there is a wide range in the amounts paid by districts, ranging from $550 to $1,200. In New York State the average wage has gone from the $650 per year in prewar days up to the present wage of $750.

In general, the size of the bus and the route mileage, strange as it may seem, appear to have little if any effect on salaries paid, except in those extreme cases where a large bus run over a long trip may boost the salary up $100 or more above the smaller bus on the shorter trip. Even here the extra time spent is not compensated for with a like increase in salary, and many schools pay equal salaries to all starting drivers, regardless of bus size and trip.

The problem in many districts is to find a qualified driver who is situated so that he can drive morning and night and have something else to do during the day. Oftentimes a local garageman, a storekeeper, a small farmer, etc., will fill the bill. Some schools have bus drivers fill in as part-time custodians or teachers are utilized, but this practice may not be entirely satisfactory. There is a wide variance in practice due to local conditions and labor shortages.

The figures[6] have been taken from 1944–45 transportation reports and give a sampling of cost items based on various sized fleets and varying mileages in consolidated school districts. (Table II)

In the smaller group sizes are individual cars or station wagons.

TABLE III. BUS OPERATING COSTS

Passenger size	Miles per day	Operating cost per mile	Per pupil cost per year	Total net operating cost
5	48	13.4¢	$203.10	$1,015.51
9	28	15.6¢	83.22	749.01
9	40	11.3¢	97.78	880.51
12	27	16.9¢	65.77	789.23

In 1943–44 a survey made of 58 buses in 23 districts in 17 counties gave the following:

Average size — 36.12 passengers

Average daily mileage — 39.51 miles

Total yearly mileage — 394,103.6 miles

Average cost of operation — $1,227.36 (excluding payments and interest)

Per mile cost — 18.6c

Per pupil cost — $33.98 per year

Total cost of operation — $71,186.95 (excluding payments)

Another group of 33 cars and buses produced the following figures:

[6]The figures used in illustrations and examples here given were computations made by the author in his work as Assistant Supervisor of Education and in original research, from original district reports on transportation for the school years 1943–44 and 1944–45. An attempt has been made to give a variance of mileages, sizes (both as to individual buses and fleets) and pupil loads from various sections of New York State in order to aid others in predicting local operating costs. The conclusions are the result of checking over 7000 transportation setups, including the 182 Supervisory Districts comprising the entire state of New York for 1943–44 and about 30 of these supervisory districts in the school year 1944–45.

TABLE IV. COST PER MILE OF OPERATION

Passenger size	Cost per mile[a]
5	10.58¢
9	12.88¢
12	13.4 ¢
31	15.31¢
49	16.26¢
55	17.96¢

In computing the actual cost of fleet operation there are many items to be considered. Amortization allowance which will satisfy the cost of the bus over a period of not more than ten years should be considered in all operating costs. Here also should be considered the type of road on which the bus will travel and the winter driving conditions, as type of road may very materially shorten the life of a bus. An estimated storage figure of $100 for large buses and $50 for small buses will probably cover rent or garage maintenance items. Driver's salary compensation should also be included, the amount depending on the salary paid. Fire insurance does not cost much and provides protection to the school district. Property and personal liability insurance has already been discussed. Some states have contract prices established for the purchase of gasoline, oil, tires and tubes, as well as supplies and equipment, and great savings result from this policy in making purchases.

Maintenance and repairs on buses vary greatly according to the size of the bus, the load carried, type of roads covered, and other factors. In general, the following figures will prove fairly adequate coverage allowance.[7]

TABLE V

Passenger size	Constant to be multiplied by yearly mileage
9	.0045
12	.0060
21	.0105
31	.0155
43	.0215
49	.0245
55	.0275

An estimate of gasoline costs may be determined by taking the average miles per gallon divided into miles run during the year times the price per gallon. At least eight quarts of oil should be allowed for each 1000 miles. A set of tires may be estimated to run 25,000 miles and tire cost computed on that basis. Here again road conditions will have an effect on the miles of service as excessive hill country may lessen the miles per gallon secured from gasoline.

As an example: **A 31-passenger bus running 10,000 miles a year (about 55 miles a day for 180 days).**

1/10 × $3,250 = Depreciation allowance	$ 325.00
Storage on bus	100.00
Rent or garage maintenance	
Driver's compensation	15.00
Estimated insurance	

[a]Excluding payments.

[7]The maintenance figures are based on average costs of maintenance as shown in district-owned bus reports, and, of course, may vary due to present wide price variations.

Fire insurance on bus Estimated coverage	10.00
P. D. and P. L. insurance Estimated coverage	70.00
Driver's salary Estimated salary	750.00
10,000 miles 7 miles per gallon Estimated gasoline cost $8 \times 10.000 \times .20 =$	16.00
Estimated oil cost $.0155 \times 10,000 =$	155.00
Estimated maintenance cost 7.00 × 20 tires — cost of 6 tires — $300, divided by 2.5 years of service at	120.00
10,000 miles per year Estimated tire cost	$1,789.57*

$\times .16 =$ 228.57

A simple formula by which the district owned bus cost of operation may be determined is to allow $135 as a fixed item for each bus, plus $20 times the number of seats plus $20 times the daily mileage of that bus.[8]

Checking this formula against the figures actually obtained from the operation data of the 58 buses in Table II:

Total seating capacity	2,095.
Total daily mileage	2,291.3
Total seats and mileage Multiplied by	$ 20.00
Produces	$87,726.00
Plus $135.00 Times 58 buses	
$7,830.00	7,830.00
	$95,556.00

Total cost of operation estimated by use of the formula

Comparing the above results with the actual cost of operation (less principal and interest payments) would give an actual cost of operation as shown by districts' financial reports of:

$71,186.95 net cost, less principal and interest.

Estimating the cost of a 36.12 (average size) passenger bus as $3,850 multiplied by 58 buses would produce $223,300. And dividing by 10 for depreciation over a 10-year period would give $22,330, as total cost per year to be added to the

$71,186.95 above
22,330.00

$93,516.95

This compares very favorably with the $95,556 of the formula. The difference is only **2.18 per cent.**

It will be noted from the various computations that cost-per-mile increases as the size of the bus increases which is to be expected. However, the greater number of pupils carried on the larger buses reduces the per-pupil cost per mile so that in general the larger buses are more economical to operate based

(Concluded on page 92)

*This cost is approximately $180 above New York State Cost of Operation due to State Contract prices available.

[8]The formula 135–20–20 is based on original research by the author on a large group of buses to provide an easy means of estimating costs of operation for the average fleet of buses.

Monthly Publication Useful in Developing Faculty Unity

W. R. Godwin[1]

Unification of the faculty would seem to be the first important step in any sound program of public relations. No amount of speechmaking by the superintendent, and no volume of news releases will keep a community "sold" on its school system over a long period of time if the faculty is disunited, if its morale is at low ebb, or if the individual teachers feel that the local school system is a poor place to work. If the faculty is working at cross purposes with the administration, all efforts to increase community support are endangered. Unless a lot of teamwork can be developed, with teachers feeling that the custodians, clerks, and board members are all on the team for a common goal, genuine progress will be considerably handicapped.

To develop unity of purpose and unity of action requires a great many things other than those discussed in this article, but one helpful influence in our work at Hutchinson, Kans., has been the publication of a monthly paper for teachers. The publication was named by the teachers in a referendum vote after the first issue, and is called *The Teachers Notebook*. It has been published for three years and has been found to be helpful to the extent that we are now glad to share our experiences with any who may be interested. The publication is not unique in appearance, but is basically different from most other school publications in certain important respects.

Not Dominated by Any Group or Individual Interest

When C. M. Lockman, dean of the Hutchinson Junior College (an integral part of the public school system) was asked to shoulder the responsibility of getting our publication started, he wrote letters of inquiry to many school systems asking for copies of their publications and for the benefit of experience in these other school systems. He was surprised to find that there were few if any publications of the kind which we planned to establish. There were numerous publications which served as the voice of the superintendent, or of the school administration generally. There were also numerous publications which were published by teachers' associations, clubs or unions, and these served as the voice of the teacher in the ranks.

Although we wanted the school district to meet the expense of our publication, we did not wish it to be considered the voice of the board of education. Nor did we wish it to become the mouthpiece of the superintendent of schools either in the minds of teachers or in fact. Moreover, we did not wish it to become the medium of the teachers' association as such. Quite consciously we strove to avoid its becoming the trumpet of any disgruntled individual or minority group. A firm resolve was made to avoid the use of items that would tend to divide us, and rather to concentrate on positive items which would give teachers pride in being connected with our school system.

[1]Superintendent of Schools, Hutchinson, Kans.

Problems Arise

How can the spirit of propaganda be kept from such a publication? How can teachers and others know that the spirit of propaganda does not control the paper?

There must be a determined effort on the part of the editor to avoid making school matters appear either better or worse in the columns of *The Teachers Notebook* than they actually are. Intellectual honesty is required. If intellectual honesty is exercised over a long period of time, surely it will be recognized.

Another guarantee may be found in widely distributed authorship. Contributions should come from elementary classroom teachers, secondary classroom teachers, from administrators, and from members of the school board. Our December, 1945, issue contained articles under the following headlines with authorship indicated as shown.

Print Shop New Program, Frank T. Fee, printing instructor
Tenure Granted Service Men, Paul Lewellyn, business manager
Education Conference, Lena Shelton, second-grade teacher
Our Problems, W. R. Godwin, superintendent
Former Teacher Receives Degree, authorship not indicated
Suggestions for Improving Community Health, W. E. Upson, board member
Interest Shown in Teachers Notebook, C. W. Lockman, dean of the junior college
I Like My Job, Inez Hanson, first-grade teacher
Do You Know That, Clyde Burk, sixth-grade teacher and building principal
Apples for the Teacher, W. R. Godwin, superintendent
Hutchinson High Has Fine Library, Ethlyn L. Flagg, librarian

Widely distributed authorship does not happen automatically. Teachers seem to be modest and often do not recognize good stories which they should prepare. It becomes the duty of the editor to know where good stories are, and to invite appropriate persons to prepare them. Teachers seldom decline such invitations.

Another problem might arise if a "superintendent's publication" or if a "teachers' mouthpiece" is already being published before the decision is made to publish the kind of paper which we are describing. Obviously it would be easier to establish such a paper on a co-operative basis if the field is not already occupied. Nevertheless, the difficulties may not be insurmountable if the purpose is genuine.

Expense Not Great

Our paper is published in our school shop and is paid for, as is all other school printing, at one half the commerical rate. The order is placed by the business manager and the bill allowed by the board of education just as any other printing bill is allowed. This covers cost of paper, ink, and enables the shop to build a reserve for replacement of machinery.

Postwar School Building Construction Trends

H. W. Schmidt[1]

This is the third and final article on postwar school building construction trends and will treat in some detail of other construction (and equipment) details not previously touched upon. May we hope that the previous articles have been of such interest that the reader will carry it along through this article and get a fairly complete overview of these trends. We may state here that the contents of the questionnaire blanks received during the past three months differ in no way from those received at the beginning of the inquiry; some difference *was* expected but did not materialize — maybe this shows stabilization and crystallizing of trends.

School Sanitation

This refers particularly to the toilet rooms and shower rooms. The steel toilet partitions head the list, with 57 per cent favoring them; slate ends up with 2 per cent. Marble and composition stalls are about evenly divided as to choice — 11 per cent for each. The surprise came when it was found that wood ran ahead of the latter two with an 18 per cent record.

In the shower room category the gang showers ran as the favorites with 78 per cent reporting this type, but 22 per cent want individual showers, virtually all for girls. In quite a few cases the gang showers are to be supplemented by single showers, again mostly for the girls. Masonry enclosures find favor with 71 per cent, but 23 per cent want steel and 6 per cent feel "composition" is desirable.

Over half of those reporting are in favor of the double tier locker for this area, and about one third are committed to the single locker while 10 per cent seem to feel they do not need lockers — at least they do not report any as needed; maybe they laid up a prewar stock!

Now back to the toilet room items: Much has been said and written about wall fixtures *vs.* floor types, the main argument being that floors can be kept cleaner and more sanitary due to the absence of the base. The argument apparently has not had much weight, as 78 per cent call for the floor water closet and 75 per cent for the same kind of urinal, thus leaving only about one quarter favoring the wall types. Construction differences in the supporting walls may have something to do with this. Or is this a custom hang-over?

For the water closet automatic seat operation with pressure tanks has some adherents, and even the gravity flushing is not entirely discarded. But the hand operated pressure-flush valve got a 90 per cent score. For flushing the urinals the automatic type came in with a 75 per cent record.

One feature of the inquiry was more than interesting and unexpected and that was the relation of the number of fixtures of each kind to the number of pupils enrolled (capacity of the building). Using the latter as a criterion with the boy-girl ratio assumed as 45–55, we get a great variation in the pupil-fixture ratio. And by the way, quite a few schoolmen shied at the quantitative question, but enough replies were received to get a fair notion of this ratio as reported.

For the girls the range, involving water closets per pupil to be supplied ran from 25 to 78; for the boys this ratio covered a range from 47 to 110, and urinals were to be installed one for each 35 to 95 pupils.

Hand-washing facilities were likewise "in the doghouse." For the girls the range was 55 to 115 and for the boys the range was upped 68 to 118. Let us hope these recorded ratios were mostly guesses. If so, then school authorities should inform themselves about a number of studies along this line made a number of years ago; these will at least show some authentic relationships between the number of lavatories and the number of pupils using them, as well as ratios involving other fixtures.

Equipment Trends: Seating

We now leave the field of construction trends and devote the balance of this article to the trends in equipment. The line between the two is sometimes indefinite and in fact we have already stepped over the line of demarkation. Hereafter we shall hew to the equipment line.

The first item of importance seems to be the type of pupils' desk and seating equipment. The replies leave no doubt about this matter when 84 per cent of those replying favor movable equipment in the elementary school; however 8 per cent like fixed desks and the same percentage is accorded tables and chairs (exclusive of kindergarten, of course). In the high schools we find 38 per cent desire tablet-arm chairs, 20 per cent believe in the desk chair, and 40 per cent just reported "movable" but do not seem to know what kind. Two per cent feel the fixed desks are O.K. in these schools.

For the study halls the fixed seat rules as a heavy favorite, and the same is true for the auditorium seating though about one third of those reporting call for movable seating here. (We suspect "combination" areas are involved here.) The library, of course, is committed 100 per cent to the table and chair seating.

In the commercial departments, tables for bookkeeping and similar work find favor with three fourths of the school authorities, and desks as well as "special" equipment lag behind. The art rooms, of course, are going to use tables, as are the sewing rooms where the four seaters are favored two to one over the larger tables. On the other hand the cafeterias want tables for six in preference to the four and eight seaters, the ratio being approximately 2:1:1.

In the cafeterias we find the gas ranges are given a preference over the electric in the ratio of three to two. Work table tops with wood surface are much preferred over other types. Complete mechanical equipment of all kinds is listed universally by the larger schools. Large refrigerators, including the walk-in type, are called for even in some of the smaller schools.

The home-economics kitchen — or is it the cooking laboratories now? — favor the electric cooking top for student tables, with the gas tops running a poor tenth. Wood covered tops lead the list, and metal and composition tops are near the tail end of the list. But for the large cooking ranges in these areas, the gas fuel is liked better than electricity; a few list oil and coal as the fuel to be used. Laundry equipment of all kinds does not seem to find favor with very many; less than 10 per cent report it as desirable.

The music departments all want many and large storage cases for sheet music, uniforms, and especially instruments. We have some notations to the effect that too little attention has been paid to storage facilities for the music suites.

Of those reporting comparatively large auditoriums, nearly all intend to equip their stages with scenery, complete electric switchboards with dimmers, spot and beam lights; disappearing footlights seem in the majority, but 20 per cent call for a fly gallery, an unusually large percentage for this type of construction and used only in the larger cities.

So far as the gymnasiums are concerned, and they number well over the thousand mark, four fifths will use folding bleachers of various kinds and only about 18 per cent will construct seating of the permanent type. This, of course, is expected, as the collapsible variety gives a good deal of usable floor space for the regular work.

Provisions for audio-visual education are listed in virtually all

[1]Supervisor School Building Service, Dept. Public Instruction, Madison, Wis.

cases, but the distribution of the facilities is a variable — there seems to be no particular agreement among schoolmen regarding it. One may question whether 58 per cent who call for such instruction in auditoriums really mean this or if the replies refer simply to the showing of motion pictures — a rather far cry from the implementation of the subject. At that about the same percentage, 20 per cent, will use the regular classrooms and rooms especially designed for this purpose.

On the other hand, 67 per cent are going to use the classrooms for the receiving end of their public-address systems, while 16 per cent and 18 per cent respectively will use the auditorium and study hall only. The general impression seems to be that much of the so-called assembly work can be done just as readily and more expeditiously through the address system. Evidently the above record bears this out.

Lockers and Wardrobes

As in the past, in the elementary schools, the storing of the pupils' clothing in the classrooms is favored by 85 per cent of the replies, and most of these call for the wardrobe type; a few favor room lockers. Ten per cent desire steel corridor lockers and a small percentage like separate locker rooms.

For the high school the situation is reversed, as 95 per cent believe the corridor locker is the proper place for clothing storage; 5 per cent want locker rooms. The use of multiple locker is recorded by only 20 per cent of the total number reporting — the single locker "is it."

Electrical Devices

The intercommunicating telephone will be found in about one half of the schools and these mostly in the larger buildings. Quite a few, however, will use the single office to room service only. The high schools will have program clocks, and very few expect to get along without them — essentially all of the electric kind. But the use of secondary clocks in the rooms is by no means universal, as only 60 per cent have signified their intention in this direction. A few expect to use "electric" clocks only; as one stated, "The — is the only electric clock for me." Too bad we can't give the manufacturer a "plug" for his product.

On the fire protection angle we have quite a universal call for all kinds of apparatus. Fire hose, reels, and cabinets will be found in a little over half of the new buildings according to our reports, but the fire extinguishers enjoy a greater popularity. The soda-acid type, or a variant, is at the top of the list, two to one, with the carbon tetrachloride kind on the short end. But the number of extinguishers designated for the different buildings seems, as a whole, rather inadequate; some buildings apparently will get along with two or three while at the other end of the line we get as many as 46 for a 600-pupil school, in addition to ample hose equipment. We suppose it is a case of, "better be safe than sorry."

The mechanical fire alarm system rates a 62 per cent favorite; the siren or horn has 22 per cent on its side, and the electric gong lags behind with a score of 16. Is reliability and freedom from interference or breakdown the reason for this range of types? Maybe, though several frankly stated that price was a consideration. What price a life?

Among the large demand for projectors the 16mm. variety is well up in front, with a 95 per cent listing "with sound." This, of course, is not unexpected. But the 35mm. is not at the bottom of the list either, as about 25 per cent will use these, mostly in the auditoriums of course. The 8mm. device falls far behind and even the still projector is somewhat more in demand than the little fellow.

Well, we are approaching the end of the major equipment items and only three seem to be left: shades, blackboards, and bulletin boards. In the shade line the double hung type looms up as a heavy favorite with a score of 78 per cent, the Venetian or slatted type comes in with 13 per cent and the single kind lagged behind with 10 per cent in favor. A few declared that they will use a special type, whatever that may be. There seems to be no doubt that shading is subject to improvement, and we have already seen something along this foreshadowed and in print on a number of occasions.

The predominant material for blackboards, or shall we say chalkboards, was given as "slate" by over two thirds of those replying; most were quite emphatic about this. Some 30 per cent desire "composition" board and a few are in favor of glass; both green and white were represented. All expect to install bulletin boards and a few designated cork but most gave no preferential material. The amount however varied greatly from a few square feet to as much as 90. The art rooms are at the head of the list as may be surmised with the music rooms a close second. The median for the classrooms hovered around the 32 square feet mark. The kindergartens, of course, showed up best in this respect. The pinning strips were called for in the elementary schools, and a few limited these to the primary department. Map rails did not show to any extent.

We might continue for pages and comment on other detailed equipment for the various departments, but it is believed the main items of interest have been covered sufficiently to give the reader of these articles a rather good idea what the school construction and equipment field has to offer in the near future.

The analytical reader will have noticed two areas which have not been touched upon: the vocational and science sections. Information about the former was not called for as this field deserves a separate and special study which may be entered upon some other time. The laboratory items were among the queries, but the answers were so indefinite, so scattered, and so fragmentary that it was not felt worthwhile to even tabulate most of the material. Why this dearth of information? We do not know. The questions were simple and the answers could have been likewise but they were not forthcoming. Maybe the science departments will be completely revamped due to lessons we learned during the war, as one enthusiast prophesied. But we doubt it.

Quantitative Factors

One of the fascinating features of such a study is that of the quantities of material and different equipment involved. Though not directly interested, we believe that even the casual reader is not without curiosity — we *are* curious.

As stated previously the replies to the quantitative inquiry were not too specific or detailed, and some of the data to be presented had to be arrived at by both interpretation and interpolation. For example, here is a report that a building with 20 elementary classrooms is to be constructed and provided with movable equipment (not tables) but no intimation as to the number of pupils per room; two kindergartens were contemplated and these were to be equipped with tables and chairs. Then we run across a high school which will have 18 recitation rooms with tablet-arm chairs, etc. How many per room? No answers. By checking back upon the total capacity of the buildings we get a fair estimate; after spending a lot of time on this quasi-statistical material we get a median of 35 capacity per elementary classroom and a seating capacity of 30 per room for the high schools. Similar material analysis was made for other items.

It has also been stated in the first of these articles that approximately one sixth of the questionnaires sent out were returned with a fair share of accuracy in the replies, and again we are going to assume that the quantities listed hereafter will be six times those reported. Of course, this is not defensible statistically but we are offering no apologies for this mathematical faux pas; the reader may do his own discounting or interpretation if he is on surer ground. So here is a partial list of equipment and we hope some manufacturers will see it, read it, and run to get ready for the "big sales" which are bound to come. It will also be observed that the quantities listed (and no doubt they will be doubled or even trebled when all reports from noncontacted areas come in) is an indication of the tremendous chore the "reconversion" imposes upon the industrial field.

A PARTIAL LIST OF SCHOOL EQUIPMENT QUANTITIES

Telephones, intercommunicating	19,500
Public-address systems	780
Program clocks	1,250
Secondary clocks	14,200
Fire alarm systems	1,860
Fire extinguishers, soda-acid	6,100
Fire extinguishers, carbon-tetrachloride	3,750
Classroom lighting fixtures	146,000
Electric lamps, filament	129,000
Electric lamps, fluorescent	210,000

Sewing machines, electric	1,100
Sewing machines, treadle	1,600
Refrigerators	930
Electric irons	1,500
Cafeteria kitchen equipment, complete	420
Typewriters	10,600
Adding and calculating machines	1,150
Projectors	2,550
Lockers for shower rooms	108,500
Drying baskets	70,200
Lockers for corridors	209,200
Chalkboards, sq. ft.	1,295,500
Bulletin boards	655,000
FURNITURE	
Tables, single seating	42,000
Tables, four seating	7,700
Tables, six seating	10,800
Tables, eight seating	2,550
Chairs	290.000
Typing tables	11,200
Bookkeeping tables	7,300
Cooking tables, home economics	3,400
Music stands	22,500
Auditorium seats, fixed	246,000
Auditorium seats, movable	130,000
Classroom desks, movable	295,000
Classroom desks, fixed	65,000

Quite a formidable list and containing only a little more than one third of all items recorded. The school equipment manufacturing has certainly entered big business, in fact has always been so, but rarely appreciated.

Estimated Values

As a matter of curiosity or rather to get an idea just how much money is involved in the above list we attempted to get present prices on these items though dealers would not commit themselves definitely. Using what we could get in the way of prices we found that the list represents an expenditure of close to $25,000,000—that is not pin money! If we consider that the list is but a small fraction of the total number and quantity of items which will be called for, we begin to see what a large inventory must be laid up to satisfy the demand of the next few years. Replacements and modernizing present equipment are not even mentioned, nor the demands of the hundreds of thousands of rural and small community schools which will be in the market. It is suspected that a one hundred million dollar "heap" is none too large to fill the need and demand in this field. But there it is.

In Conclusion

We have probably now reached a point when interest may wane and *finis* is in order though we have by no means exhausted the subject. Probably we have dished up enough "food" for the guests at the Table of Information to satisfy their craving for this particular type of viand; let us hope it will have neither the effect of satiety nor mental indigestion but leave them in the pleasant frame of mind induced by a satisfying meal. So, for dessert, *finis*.

Classroom Ventilation Requirements

Albert J. Nesbitt[1]

In the light of our present-day knowledge, classroom ventilation requirements may be rationalized upon two bases: (1) maintaining an acceptable odor level; (2) maintaining the proper effective temperature level. It is upon the attainment of these two conditions that the case of adequate ventilation of the classroom rests.

The Acceptable Odor Level

Our approach to the problem upon the basis indicated must define what is meant by an acceptable odor level. In the field of air quality, outdoor air supply and odor intensity, the work of Professor C. P. Yaglou and several of his associates, sponsored by the American Society of Heating and Ventilating Engineers in co-operation with the school of Public Health of Harvard University, is widely recognized as authoritative.[2]

For the purpose of this review, I have made a copy of Table 5 (Fig. 1) from the *Transactions* just referred to and would like now to present this to you.

In the classification of the data shown in Fig. 1, all observations in which the subjects were warm or cold have been excluded in order to restrict the relationships as much as possible to factors pertaining to air quality and outdoor air supply.

It will be observed that with simple ventilation (and that is what we are interested in for this discussion does not embrace ventilation problems beyond those encountered in and during the heating season) and with 200 cubic feet of air space per person (the normal air space provided per pupil in the average school room) the air quality was poor to bad when the air supply was under 3 C.F.M. per person, improving rapidly as the air supply increased to 15 C.F.M. Beyond this point further increases in the ventilation rate had little or no effect on air quality, from the standpoint of the occupants, etc.

Air Quality, Outdoor Air Supply, and Odor Intensity
Impressions of subjects After Exposure of 3½ hours to comfortable conditions of temperature and humidity

Outdoor Air Supply cfm per Person	Mean Air Supply cfm per Person	Mean Odor Intensity[3]	Total Number of Subjects	Air Quality Number of Subjects Recording					Mean Air Quality
				Excellent (5)	Good (4)	Fair (3)	Poor (2)	Bad (1)	
Simple Ventilation tests. Air space per person 200 cu ft									
Under 3	2.5	3.75	7	..	..	1	3	3	1.7
3-5	3.7	3.21	25	.	1	18	5	1	2.8
5-7	5.7	3.08	33	..	3	22	8	..	2.9
7-10	8.7	2.91	14	..	5	8	1	..	3.3
10-15	13.9	2.20	42	1	29	12	..	..	3.7
15-17	15.8	2.02	27	4	16	7	..	..	3.9
29-31	29.7	1.54	15	3	10	2	..	..	4.0
38.7	38.7	1.25	6	..	6	..	..	..	4.0

Fig. 1

In this discussion of acceptable odor intensity, I intend that we deal with a level acceptable to the occupants. By the nature of a schoolroom our requirements should be predicated upon the reactions of the occupants and not upon observers. I say this, because it is known that an odor intensity acceptable to an occupant is not always acceptable to a person coming from outdoors into an occupied room.

The observations referred to dealt with groups of individuals of average or balanced socioeconomic status and habits of personal hygiene. The complete study by Yaglou shows a wide range of variation in outdoor air requirements for a given odor intensity, varying widely for persons of different socioeconomic status and habits of personal hygiene. The designing engineer has no control over the habits of personal hygiene of room occupants, so I have in this discussion quoted that part of Yaglou's work that deals with persons of average or balanced socioeconomic status. Following a complete study of this

[1]President of John J. Nesbitt, Inc., Philadelphia, Pa. The present paper was read November 12, 1945, before the Air Conditioning and Ventilating Engineers Society, Baltimore, Md.

[2]A complete report on this work may be found in Volume 42 of the 1936 *Transactions* of the American Society of Heating and Ventilating Engineers, starting on page 133.

report one realizes why Yaglou said in his summary: "The impossibility of fixing any single standard that would apply under all conditions is clearly evident. Each case, it would seem, should be considered on its own merit."

Because it is not practical in the design of a school ventilation system to consider each case upon its merit, we are required to deal with averages. Yaglou's work indicates that an outdoor air supply of 10 to 15 cubic feet of air per minute per person results in a mean air quality of a shade under good. Good is rated at 3.8, whereas you will see the mean air quality shown for 10 to 15 cubic feet of outdoor is 3.7.

When Are Odors Noticeable?

In the winter of 1934–35, F. C. Houghten, director of the American Society of Heating and Ventilating Engineers' Research Laboratory, made investigations in this same field in two public school buildings in a community just outside of Pittsburgh. These investigations were reported by Houghten in a paper entitled "Classroom Odors with Reduced Outside Air Supply."[3] In his summary dealing with odors Houghten stated:

1. Odors are little noticed by the occupants of a room, but are noticeable to one entering from a space with lower odor intensity.
2. Overheating gives a more pronounced sensation of discomfort than odors.
3. Odors are noticeable to one entering a room and looking for them when the air change drops below 11 C.F.M. per person. With an air change of approximately 9 C.F.M. per person, they become noticeable without looking for them, though not particularly disagreeable. With an air change of approximately 7 C.F.M. per person they become noticeably disagreeable.

Referring now to Houghten's work with relation to the reaction of the room occupants, Fig. 2, which I have taken from these trans-

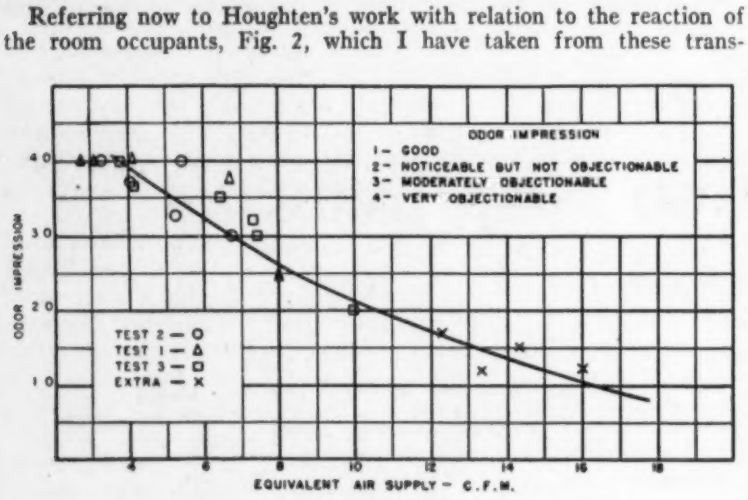


Fig. 2

actions, shows Houghten's relation between odor intensity and air supply. From this table we find that if an odor intensity classed as "noticeable but not objectionable" is taken as the lower safe limit of air change, then an air change of from 10 to 11 C.F.M. per person is indicated as necessary. Houghten states:

For economy in ventilation a level midway between two and three (Fig. 2) or midway between "noticeable but not objectionable" and "moderately objectionable," may be acceptable. . . . If this reasoning is accepted, this would permit a reduction in air change to approximately 8 or 9 C.F.M. per person.

Houghten emphasizes the fact that these deductions apply only to children of junior high school age or those having an average body surface area of 17 square feet. Houghten further states that "since all metabolic processes are assumed to be proportional to body surface area, it is safe to assume that odors may also obey this law, and that when personal cleanliness is not a factor, air change should vary with reference to the body surface area of the occupants."

It is interesting at this point to note that Yaglou states:

Grade school children between 7 and 14 years old have apparently an equation of their own. For in spite of the smaller body surface and lower metabolism, they give off more odor than the adults and their air requirements are, therefore, higher.

In any event, if in our analysis we set our outdoor air supply at 10 to 15 cubic feet of air per minute as required, for an acceptable odor intensity, we bring these two authorities into agreement.

[3]Volume 41, *1935 Transactions*, American Society of Heating and Ventilating Engineers, p. 253.

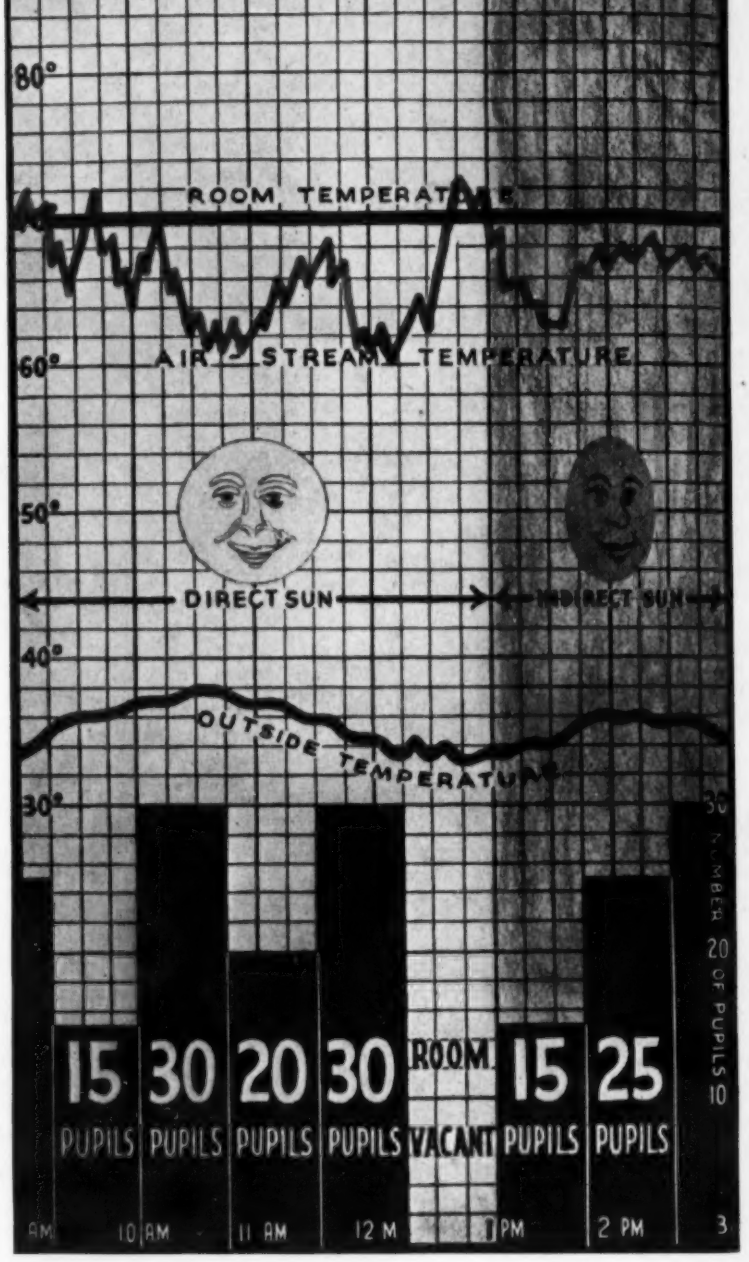


Fig. 3

In 1932, I directed a long series of schoolroom ventilation investigations confined to a single classroom in the Jules Mastbaum Vocational School in Philadelphia. Observations were made every single school day from February 15 until the end of the study in April, 1932. I want to speak in detail of this study later on in developing outdoor air quantities required for heat removal but at this point, I should like to report that, with the outdoor air supply reduced to a minimum of 10 C.F.M. per pupil, an acceptable odor intensity level was maintained in this room. The average age of the students was 15.

The Minimum Air Per Pupil

Accepting as we must, the difficulty of establishing a single standard that would apply under all conditions, the minimum of 10 cubic feet of outside air per occupant as recommended in 1932 in the ASHVE Ventilation Standard and subsequently adopted by this Society, appears to be an acceptable average safe minimum. We must not overlook the fact that since 1932 an increasing number of classrooms throughout the United States have been equipped with ventilation systems in which the minimum outdoor air supply has been reduced to 10 C.F.M. and that today, the widely accepted standard of minimum outdoor air requirements at 10 to 15 C.F.M., results in an

odor intensity level acceptable to the room occupants. If we are satisfied then to accept the evidence that our minimum outdoor air quantity for odor requirements may be set at 10 cubic feet, we can move on to a determination of the quantity of outdoor air required to maintain an acceptable air temperature throughout the occupied area of the room.

At this point we could rest our case upon the idea that the ventilation requirements shall be a minimum of 10 C.F.M. of outdoor air per person or as much more as is needed in preventing overheating within the space by maintaining a uniform temperature of 70° F. throughout the occupied area of the classroom.

Where there exists disagreement as to the volume of outdoor air required over and above that needed to maintain an acceptable odor intensity level, the issue can be resolved by the simple process of checking the dry bulb temperature at the breathing line and at the floor line. So long as the variation in dry bulb temperature at these two points throughout the occupied area is not greater than 2° from the desired room temperature, you can be sure that sufficient outdoor air is being introduced to prevent overheating.

Since the designing engineer must specify maximum as well as minimum air quantities it becomes necessary to establish in the design of the system, a maximum as well as a minimum air quantity. I should like to proceed to do that upon a rational basis.

Assuming that all artificial heat sources are under control within the space, that is to say, heat risers and connections are covered, and assuming that there is no unusual source of artificial heat gain in the classroom, it can be said that the quantity of outdoor air required for heat removal will depend principally upon the following factors:

a) The total amount of body heat given off by the room occupants
b) Radiant heat from the sun
c) The temperature at which the outdoor air is introduced into the occupied space
d) Outdoor temperature

The average sedentary child of 15 years of age gives off about 240 B.T.U. units per hour of sensible heat through the process of metabolism. The Jules Mastbaum School test, previously referred to, indicated there were periods of long duration when for an outside temperature of 40° and with sun shining into the room, the rate of heat flow out of the classroom was just about compensated for by the radiant heat from the sun. So one might say that a point of equilibrium had been reached so far as heat gain or heat loss in the room was concerned. Under such a condition it is practical to solve the quantity of outdoor air required upon the basis of the theoretical metabolic rate. But to do so, requires agreement as to the minimum temperature at which outdoor air can be introduced into the classroom without causing drafts or unpleasant sensations of air movement and without causing too wide a differential in dry bulb temperature at any point in the occupied area of the room.

Temperature of Incoming Air

In a paper entitled "A Logical Basis for Determining the Volume of Air to be Circulated in Classroom Ventilation" written by the speaker[4] may be found complete data which clearly shows that outdoor air cannot, within the practical limits of the design and construction of a heating and ventilating system within a public school building, be introduced into the classroom at a temperature lower than 60° without causing both unpleasant sensations of air motion and cold floors.

Although these studies were complete enough to establish this fact, I should like to direct attention to the findings of F. C. Houghten as reported by him in a technical paper entitled "Classroom Drafts in Relation to Entering Air Stream Temperatures"[5] The studies reported in that paper were conducted under actual schoolroom conditions in the Woodlawn Avenue and Shaler Schools, Munhall, Pa. The rooms under observation were equipped with unit ventilators. In this paper Houghten states:

Figures 4 and 5 indicate that air velocities as high as 50 F.P.M. and cooling powers as high as 6.1 may be expected to occur in rooms studied with an entering air temperature of 50° F. When the average temperature of the unaffected part of the room is between 70 and 71° F., an entering air stream temperature of 55° F. may give high localized air velocities of approximately 38 F.P.M. and Kata cooling powers of 5.5. It therefore follows that, for the rooms and for the particular heating and ventilating system studied, the temperature of the air stream discharged by the unit must be limited to approximately 55° F. in order to entirely eliminate the probability of localized draft.

The later model of unit used in the Woodlawn School and a few rooms equipped with another make of unit in the Shaler School were studied when the outside temperature was too mild to attain very low entering air stream. These studies do, however, indicate about the same relation between maximum draft observation and entering air stream temperature as was found for the larger number of rooms studied in the Woodlawn School.

The reference that Houghten makes to air velocities, of course, are in the occupied area of the room and in another part of the paper the following statement may be found:

An air velocity in the neighborhood of 25 F.P.M. with an air temperature of one to one and a half degrees below the prevailing room temperature could be distinguished by its cooling sensation. It would not, however, be classified as objectionable to the observers engaged in the study. Neither was it classified as objectionable by most opinions from the children and teachers. In fact, there were more individual opinions expressed that the sensation was pleasant rather than unpleasant. An opinion as to whether such a condition is pleasant or unpleasant is undoubtedly closely associated with the physical condition of the individual. An air velocity in the neighborhood of 40 F.P.M. with an air stream temperature of 1½ to 2° below the prevailing room temperature, or a Kata cooling power of 6.1 compared with 4.9 was decidedly noticeable and was invariably judged by observers and students as unpleasant.

In Houghten's conclusions he states:

1. Air movement in the effected portion of the room was found to increase with a lower unit ventilator discharge temperature. The resulting cooling power was also found to increase with a lower discharge temperature.

2. Observations of the worst draft conditions within the room during a large number of surveys indicated that undesirable conditions of draft may occur whenever the unit discharge temperature falls below 55° F.

3. An air movement of approximately 25 F.P.M. with a temperature of from one to one and a half degrees below the prevailing room temperature was found to be noticeable but not necessarily objectionable, while a high velocity of approximately 40 F.P.M. and a temperature of two or more degrees below the prevailing room temperature was decidedly noticeable and objectionable.

No Incoming Air Below 60°

The Mastbaum and the Houghten studies clearly indicate that within the practical limits of the design of heating and ventilating systems for school buildings, outdoor air cannot be introduced into an occupied room at a temperature lower than 60° without discomfort to the occupants. This then means that in the conventional ventilation systems now in use the cooling power is limited to a 10° drop in temperature. At this point, I should like to return to our previous reference herein to the quantity of sensible heat given off by the average student of 15 years of age, of 240 B.T.U. per hour or 4 B.T.U. per minute.

One B.T.U. will rise 55 cubic feet of air one degree per minute. Therefore, 4 B.T.U. will raise 220 cubic feet of air one degree per minute. Dividing the 220 cubic feet of air raised one degree by the allowable difference between room temperature and outdoor air temperature of 10°, results in 22 cubic feet of air per minute being required at a temperature difference of 10° for the removal of the sensible heat from each room occupant.

Dealing with the problem of body heat removal only, under conditions where all other pertinent thermal factors have reached a state of balance or equilibrium, it is clear that the 10 C.F.M. of outdoor air set as a minimum for odor intensity is inadequate to remove body heat if the outside air temperature is limited to a low of 60°. For this purpose under the stated conditions at least 22 C.F.M. of 60° air must be supplied per person.

When the heat of metabolism as given off by the room occupants is added to the radiant heat from the sun, the problem in the ventilation of the classroom is not the addition of heat to the room, but rather the removal of heat.

The next chart (Fig. 3) has been prepared from studies conducted at the Jules Mastbaum School.

Referring to the chart, the solid black line at 70° shows the room temperature as measured 66 in. above the floor. The red line marked "air stream temperature" indicates the temperature of the air leaving the unit ventilator as measured by a recording thermometer located in the unit air stream 2 in. above the unit discharge. The air being handled by the unit ventilator was made up of a mixture of indoor and outdoor air. The total quantity of air in circulation was 30 cubic feet of air per minute per pupil, of which quantity a minimum of 1/3, or 10 cubic feet, was being taken from outdoors at all times. The line which fluctuates between 34 and 38 F. is the outdoor temperature line. The area blocked in solid black columns indicates the number of room occupants. The direction of the sun is shown. Where the full face is shown, this indicates direct sun rays in the room. Where the partial face is shown, this indicates partial or indirect sun rays.

[4] American School Board Journal, September, 1932, p. 44.
[5] Volume 41, *1935 Transactions*, American Society of Heating and Ventilating Engineers, p. 268.

The only source of artificial heat in this room was the unit ventilator which served the dual purpose of heating and ventilating. There was not any supplementary direct radiation or other artificial means of heating. There were no exposed pipe lines or other uncontrolled sources of heat. The room was up to temperature at 8:45 a.m. when the first class assembled. It will be noted from this chart that as the room occupancy increased, the temperature of the ventilation air was automatically reduced below room temperature, thus providing cooling power to remove the heat from the room. It should also be noted that this cooling power continued to be in demand as long as the room was occupied, but when it was again vacated at the noon period, the temperature of the air stream promptly rose above room temperature. It then became necessary to provide artificial heat to maintain the desired room temperature.

Effect of Sun

From this chart and from others prepared from the data gathered during the Mastbaum study, it is clear that on a sunshiny day even when the outside temperature is 40° or above, the effect of the radiant heat from the sun not only compensates for the loss of heat from the room, but actually adds heat to the room in excess of those losses, to the extent that simply providing 22 cubic feet of 60° outdoor air for the removal of body heat is adequate, so additional outdoor air must also be provided for the removal of solar heat. The studies here show that about 30 C.F.M. per person of outdoor air is required to prevent a schoolroom, occupied to capacity, from overheating when the temperature of the air introduced from outdoors is limited to 60°.

If one were to permit the minimum requirement of 10 C.F.M. outdoor air to become maximum requirement, the result would be one of two extremely undesirable conditions. Either the room would overheat because of lack of cooling power, or this reduced quantity of air would have to be discharged into the room at such a low temperature as to produce drafts as well as wide variation of temperature within the occupied area unless an entirely different system of air distribution was to be employed than that which to date has proved practical within limitations of a school building.

No student of this subject, to my knowledge, has failed to recognize the harmful effects of overheating. I believe it was Dr. Winslow, who following his exhaustive work for the New York State Commission on Ventilation, made the statement that "More harm comes from overheating in public school buildings than from any other single source."

Again quoting Professor Yaglou: "Given the specifications of minimum outdoor air requirements under various conditions, the problem would then resolve to recirculating a sufficient amount of outdoor air when needed in order to maintain proper temperature, humidity, and air movement. Temperature, in fact, is one of the most important factors in air quality and unless it is controlled, the quality will suffer badly no matter what the outdoor air supply, particularly when air is overheated."

You will recall the quotation from Houghten's summary: "Overheating gives a more pronounced sensation of discomfort than odors."[6]

Finally, if we were to permit 10 cubic feet of air to become both the minimum and the maximum, we would find it necessary, in order to prevent overheating, to introduce the air into the room at 50° or below during a great many days during the heating season.

(To be concluded in April)

[6]Volume 41, *1935 Transactions*, American Society of Heating and Ventilating Engineers, p. 264.

Sanitary Supplies for Schools

*Paul W. Seagers**

Introduction

The whole problem of the purchasing of sanitary supplies for schools is so vast that it would take several volumes to treat it adequately. Furthermore, the type, composition, and amount of supplies to be used depend largely on the local conditions, including location, age, and type of construction and facilities of the school plant, the socio-economic status of the community, the custodial program, and the general community and school morale. It is the purpose of this article to treat of only a few selected sanitary supplies, giving sources of further information and several formulas, not with the idea that schools should go into the manufacture of these supplies, but rather to help school purchasing agents, principals, and superintendents to become more intelligent buyers. Certainly good, reliable manufacturers welcome the intelligent buyers today, while the dishonest and "fly-by-night" outfits will avoid them.

1. Cleaning Soaps, Detergents, Powders and Scouring Powders

The American Society for Testing Materials[1] gives the following definitions which are important to know before discussing the actual compositions and uses of soaps.

Anhydrous soap — pure soap

Builder — any material added to soap to improve its effectiveness under conditions of use

Built soap — a mixture of soap and one or more builders containing not less than 50 per cent of anhydrous soap

Detergent — any compound or mixture which cleans

Filler — a material added to a soap or other detergent which does not improve its attractiveness or its effectiveness under the conditions of use

Pure (palm oil) soap — a soap in which the fatty acid stock is solely from the source named (palm oil)

Soap — the product formed by the saponification or neutralization of fats, oils, waxes, rosins, or their acids with organic or inorganic bases

Soap powder — a mixture of soap and one or more builders, containing not more than 50 per cent of anhydrous soap (It is understood that soap powders may contain as little as 15 per cent of anhydrous soap.)

Straight soap — commercially pure soap in which the sum of free alkali, total matter insoluble in alcohol, and sodium chloride does not exceed 4 per cent

For our purpose we shall consider oil soaps. Schwarcz[4] says: "Noteworthy features of oil soaps are that they dissolve easily, are unguent due to bland oils and glycerol content, are harmless to most surfaces, rinse quickly, and leave no residue. Cake soaps, chips, powders, and soda soaps in general do not have these qualities, or if so, to a lesser degree . . . . Good oil soaps contain potash, and potash is essential . . . . One of the particular advantages of oil soap is that if it dries on a floor it will still remain transparent; soda tallow soaps by contrast will show a white film. After drying, soaps in liquid form tend to revert to the original transparency or opaqueness in appearance." Twenty-eight to 38 per cent oil soap is jellylike, similar to vaseline; 38 to 50 per cent soap is firmer and drier; 50 to 67 per cent soap is very firm; soap with 67 to 75 per cent oil gets soft; oil content from 75 per cent up increases in firmness. It is usually cheapest to purchase a 50 to 60 per cent soap and to place a large handful of it in a cheese clothbag and stir in a pail of water to dilute the soap with water, distilled preferred (two parts of water to one of soap) and to use a half cup to a pail of water. Mezerik[3] mentions how important it is to thoroughly dissolve the soap in water.

Sometimes pine scrub soaps are made by adding pine oil to soya and corn oil soap. The thickness of these soaps varies with the amounts of pine oil, so that consistency alone is no indication of the anhydrous content. Pine oil can also be used to cover up inferior grades of soap. Pine oil in soap has deodorizing and probably some disinfecting properties. Soya, corn, sesame, sunflower, peanut, olive, linseed, and cottonseed oils are most commonly used in oil soaps. Many people prefer linseed because it was the first vegetable oil used for this purpose; however, experience has proved that the first five types of oil listed above are better than linseed oil.

The detergents listed by the American Society for Testing Materials[1] are as follows:

Soda Ash, which is anhydrous sodium carbonate in powder form. Use when a moderately strong alkaline material is desired.

Caustic soda is sodium hydroxide, and is furnished in airtight containers, in flake, powdered, or solid form. It is used where a strongly alkaline material is desired.

*Supervising Principal, Cato-Meridian Central School, Cato, N. Y.

[1]Superior figures refer to corresponding number in bibliography at end of article.

Modified soda (laundry soda), sequicarbonate type, is a white powder or crystal, composed of sodium carbonate and sodium bicarbonate. It is best used where mildly alkaline material is desired.

Sodium metasilicate is obtained in white granular or crystalline form. It should be used where a moderately strong alkaline material is desired.

Sodium sesquisilicate is a light-colored granular product and is furnished in airtight containers. Use where a strongly alkaline material is desired.

Trisodium phosphate may be bought in white flake, granular, or crystalline form. It is used where a moderately strong alkaline material is desired.

Tetrasodium pyrophosphate (anhydrous), white granular or powder, is used with soap or other detergents where a mildly alkaline material with appreciable water softening properties is desired.

Linn[2] suggests that one tablespoon of trisodium phosphate added to one gallon of warm water is one of the best and cheapest cleaning solutions. (Note that trisodium phosphate in any degree of concentration is a paint remover.) He also recommends the following formula for a scrubbing compound: two pounds of linseed or other approved oil soap and one pound of trisodium phosphate to one gallon of water. Use one cup of this to a pail of warm water.

According to the National Bureau of Standards,[5] "soap powders usually contain 15 to 20 per cent of anhydrous soap and the balance is crystallized sodium carbonate, often with the addition of borax, trisodium phosphate, etc." Many manufacturers incorporate a definite amount of an "inhibitor," such as a silicate of soda, to retard or prevent attack of aluminum ware by the alkaline salts (sodium carbonate or other builders). There are also soap powders or washing powders containing a bleaching agent in the form of sodium perborate. These products are often called "oxygenated soap powders."

Scouring powders contain some abrasive such as pumice, volcanic ash, feldspar, quartz, and marble, with soap powder. For a fuller description, see United States Bureau of Standards, circular No. 370.

2. Toilet Bowl and Drain Pipe Cleaners

According to Linn[2] trisodium phosphate in hot water makes an excellent toilet bowl cleaner. He also suggests that sodium bisulphate be used in small quantities when the bowl is not chipped or cracked.

For cleaning drain pipes household lye is not recommended as it frequently reacts with the grease in the pipe to form a hard soap. Frequently a pound of sodium carbonate or soda ash in a pail of hot water will suffice to clean a drain pipe; however, if the pipe is practically stopped up, the more active ground potassium hydroxide may be necessary.

3. Antiseptics, Disinfectants, and Deodorants

Anyone who has read "Your Money's Worth" by Stuart Chase and F. J. Schlink will understand that the American people have wasted considerable money in the purchase of antiseptics, disinfectants, and deodorants. The best practice is to clean with plenty of good soap and water instead of trying to cover up one odor with a stronger one. Schwarcz[4] says: "It is common knowledge that soap removes some germs from the skin (and other surfaces) due to its mechanical action of washing. In addition, soaps are strongly bactericidal against pneumococci, streptococci, meningococci, gonococci, diphtheria bacilli, influenza bacilli, and spirochaeta pallida. Their activity against these organisms compares favorably with that of many of the recently synthesized chemicals. When properly used for cleaning the hands or for washing eating utensils, soaps are undoubtedly potent factors in preventing the spread of diseases due to these organisms. The action of soaps as germicides is, however, limited by the fact that they do not destroy staphylococci or typhoid bacilli."

When we consider disinfecting agents we usually think in terms of chemicals. However, there are other valuable disinfectants, such as fresh air and sunlight which is the most effective of all, heat and cold and ultraviolet ray lamps. Schwarcz[4] classifies the chemical disinfectants as follows:

A. Organic compounds such as phenol cresols and analogous products, formaldehyde, pine oil.
B. Oxidizing agents such as hypochlorites, peroxides, permanganates.
C. Salts of heavy metals such as mercury compounds.
D. Fumigants such as gases which kill germs in the air.

He also says, "An ideal disinfectant should have the following properties: It should be nontoxic and harmless to the skin; noncorrosive; it should act quickly and be effective in high dilutions against all organisms; it should be unaffected in its germicidal action by the presence of organic matter of alkali or acid condition; it should be stable, odorless, and stainless. Needless to say no one type meets all these qualifications."

When disinfectants are needed, purchases should be made on the basis of their phenol coefficients. "Phenol coefficient means the number of times the disinfectant is stronger than pure carbolic acid against bacteria. Carbolic acid (phenol) is used as a standard of strength and is considered to have a coefficient of 1, and the recommended dilution is usually 1 part to 20 parts of water."[4] A solution of formaldehyde, known as formalin, is one of the cheaper and more effective disinfectants used for spraying.

Besides pine oil, paradichlorobenzene blocks are a good deodorant especially for urinals. (When urinals are kept clean the blocks are seldom necessary.) These blocks can be made either by fusion or high pressure. The odors used are usually pine, cedar, rose, oriental, and lilac perfumes in alcohol. It is not desirable to have the blocks highly colored. Because they evaporate rapidly the blocks should be stored in airtight paper.

4. Wood, Metal, and Glass Polish

Consumers Research has made some excellent studies of polishes and the annual buying guide should be consulted for further information. Most good furniture polishes have some oil base, such as linseed oil or paraffin oil. A combination of linseed oil, turpentine, mineral oil, and a small amount of beeswax make a good polish. A polish developed by the Bureau of Construction and Repairs of the Navy for use on varnish and paint coatings on wood is formulated as follows:

Cider vinegar	125 parts by weight
Petroleum spirits	226 parts by weight
Turpentine	135 parts by weight
Denatured alcohol	22 parts by weight
Boiled linseed oil	100 parts by weight
Raw linseed oil	121 parts by weight

Do not store in a metal container.

Other simple formulas are:

Raw linseed oil	1 pint
Turpentine	2 pints
Beeswax	1–2 ounces
Raw linseed oil	1 pint
Water	3 pints
Denatured alcohol	1 pint

Frequently just straight mineral or paraffin oil is used for polishing.

Two good metal polish formulas are as follows:

No. 1

Chip soap	10 parts by weight
Silica dust	20 parts by weight
Air floated tripoli	20 parts by weight
Pine oil	2 parts by weight
Water	48 parts by weight

The silica dust and tripoli should be fine enough to pass through a 325 sieve.

No. 2

Orthodichlorobenzene	5 parts by weight
Precipitated chalk	1 part by weight

Windows and mirrors may be cleaned very well with clear water or water to which a bit of washing soda, borax, ammonia, kerosene, alcohol, or acetone has been added. Alkaline solutions and solutions containing alcohol or acetone should not come in contact with paint, lacquer, varnish, or enamel surfaces.

An excellent cleaner or polish is 15 to 25 per cent by volume of grain or denatured alcohol used with a small spray. One reported in patent literature is 8 fluid ounces of diethylene glycol to 120 fluid ounces of water and a small amount of alcohol and coloring matter. The coloring matter can be eliminated.

5. Sweeping Compounds

Most sweeping compounds contain as a base sand, sawdust, and oils or waxes. Frequently, moistened sawdust does a good job. The formula used by the United States Treasury Department is as follows:

Sand	10 parts by weight
Fine sawdust	3.5 parts by weight
Salt	1.5 parts by weight
Paraffin oil	1 part by weight

Other government bureaus use this one:

Fine sand	35 parts by weight
Pine sawdust	40 parts by weight
Paraffin oil	15 parts by weight
Water and dye if desired	10 parts by weight

For use over water-emulsified waxes substitute water-emulsified wax for paraffin oil. Sometimes sisal hemp tailings are used in place of, or with sawdust.

The Cotton Research Foundation of Memphis, Tenn., recommends 95½ parts by weight of cottonseed hull bran to 4½ parts by weight of paraffin oil.

(To be concluded in April)

Cleveland's Active Board President

Mrs. Norma F. Wulff, who was recently re-elected president of the Cleveland Board of Education, has been appropriately called Cleveland's most industrious and versatile woman.

In addition to her school board duties — she is the first woman ever to hold the presidency in the city's system — Mrs. Wulff has served on countless civic, cultural, and patriotic committees, while at the same time directing her home and family.

A tireless worker, her day is a whirl of meetings, from the Board of Education Building, to the Cleveland City Hall, to the Cuyahoga County Courthouse, to parent-teacher sessions, to welfare and social work gatherings — and, as if these were not enough, to meetings in Columbus and Washington.

Whenever school board policies need to be explained or defended, whenever administrative problems need solving, Mrs. Wulff is there with the answers. In last fall's bitter election campaign it was largely through her efforts that she and the three incumbents campaigning with her were carried to overwhelming victory.

Mrs. Wulff is serving her ninth year on the school board, having been first in office in January, 1938. She was re-elected in 1941 and was vice-president three years before taking over board direction in January, 1945. Last January (1946), in spite of a tradition that the presidency is normally rotated among the other members, she was retained, a reward for her executive abilities.

When she first assumed board membership, it was with a thorough knowledge of the school system. She had been in touch with educational affairs in the city for years as a social worker and in parent-teacher activities. For eight years prior to her election she had attended every board meeting, variously as a delegate from the League of Women Voters in Cuyahoga County and other groups.

As a board member she has fought strenuously for a single salary schedule, which now is near adoption, and for veterans' education, for increased courses in international affairs and for safety education and recreation, the latter as a method of whittling down juvenile delinquency.

"I shall not rest," she said at a recent meeting, "until Cleveland's teachers are working under a single salary schedule; until all of our employees receive wages commensurate with the money we have or will get. We must give the people the best education possible."

Since Mrs. Wulff has been on the school board she has not missed a meeting. She spends a major part of each day in her fourth-floor office of the Board of Education Building, talking with employees and with parents and children.

"Mother has never taken a vacation as long as I can remember," one of her daughters, Dorothy, recalled recently. "I think she is afraid she might miss some goings-on in Cleveland."

Some time ago Mrs. Wulff took her first paying job — that of a member of the Cleveland Zoning Board. She is the first woman to serve on it and was reappointed to a five-year term by Mayor Thomas A. Burke last January. She was the only woman of a 15-member Ohio Schools Committee, which worked successfully for a state foundation bill for school support.

Mrs. Wulff has been a sparkplug in welfare work. While welfare chairman of Waverly Elementary School Parent-Teacher Association, she arranged supplementary feeding of indigent children. With teachers' help she studied one group to learn whether feedings of milk, crackers and jelly sandwiches had increased the pupils' learning ability. The test proved it had.

As a delegate to the Cleveland Council of Parents and Teachers some years ago, she fought for lower carfare for school children and cross-town transportation so they could easily reach many of the city's cultural centers. She organized groups, got 100,000 signatures, and the result was the children s car pass used today.

The health of Cleveland's pupils has been her concern, too, her first piece of legislation when she took her school board chair being a resolution to establish, in co-operation with child health associations in Cleveland, free dental clinics and preschool centers. She campaigned vigorously for them with never a letup until they became a reality.

Safety, too, has become one of her pet projects. In her capacity of vice-president in charge of the women's division and home safety in the Greater Cleveland Safety Council she has promoted her ideas before groups in all parts of the city and suburbs and in numerous radio addresses.

Mrs. Wulff also has been instrumental in organizing citizenship classes for foreign-born parents of school children. Her interest in music led her to start a drive which resulted in sending children to the first symphony concerts sponsored by the PTA in the city.

In the field of recreation she announced a determination to stamp out delinquency among Cleveland's juveniles. In co-operation with other officials she has succeeded in establishing recreational facilities which have won the commendation of thousands of parents. She has served on the Mayor's Advisory Committee on Recreation and on the National Committee for Recreation.

Innumerable other projects have felt the force of her energy — hospital and Red Cross work, movements sponsored by the Welfare Federation of Cleveland during the depression years, and the various war activities of the Greater Cleveland Council for Civilian Defense. She has journeyed over Ohio in the interest of education.

Education, despite her other activities, has been her primary concern through the years.

Mrs. Norma F. Wulff
President, Board of Education,
Cleveland, Ohio

She knows every department of the schools — housing, finance, education. She can reel off figures about the number of teachers, employees, buildings, pupils, and salaries. She loves it.

"In this business of education," she declared not long ago, "we have to do a selling job as we never have done before. There is much to do: competent teachers must be attracted to the profession; parents must understand that we need more money to properly educate their children. The public must know the problems of their schools."

Mrs. Wulff's husband, John C. Wulff, is supervisor of practices and research at the Ohio Bell Telephone Co., in Cleveland. Her daughter, Dorothy, also is an employee of the company. The family lives at 1507 E. 107th Street. Another daughter, Mrs. Marianne West, lives with her husband in Dayton, Ohio.

BOARDS OF EDUCATION

► Newton, Iowa. The board of education has decided to take advantage of the consultant service being furnished through the College of Education of the State University. Six representatives of the department have conferred with the board on current school building problems.

► Aurora, Ill. The west side board of education has approved plans insuring its nonteaching employees under the Illinois Municipal Retirement Fund. The plan which became effective on January 1 was approved by the voters last April. Miss Helen Leigh, secretary of the board, will act as the agent in matters pertaining to the fund.

► Racine, Wis. The board of education has voted to give a cost-of-living bonus of $16 per month to all regular school employees. Bonus payments will be made in 12 equal monthly installments.

► El Paso, Tex. The school board has limited the use of school bands to strictly school functions. The decision as to what constitutes a school function will be made by the board.

Maintenance of School Lighting

Willard Allphin[1]

The average schoolroom is dusted daily either by the building custodian or by the teacher or by both. Desks, blackboards, windows, and floors are cleaned regularly, but seldom is any attention paid to the condition of the walls, or to the lighting fixtures overhead. Walls are scrubbed infrequently, seldom receive a coat of paint more than once every two years, and, until a bulb burns out and needs replacement, the lighting is completely neglected. Even then, only the one fixture is replaced and the others dusted, superficially, if at all.

Actually, walls and lighting fixtures should receive proportionately as much care as the other equipment in a classroom, for dirty walls soak up a great deal of light, and old and dirty bulbs and fixtures reduce the light available from them to an alarming degree.

Dirty bulbs and fixtures, dirty walls and ceilings, and outworn and underwattage bulbs all contribute to the failure of a classroom lighting system to deliver the light for which it was designed.

[1]Applications Engineer, Sylvania Electric Products, Inc.

As a general rule lamps and lighting fixtures in a schoolroom should be washed with soap and water once every two months. The type fluorescent fixture illustrated can be cleaned in place as shown, or the side panels can be removed and carried down the ladder for cleaning elsewhere.

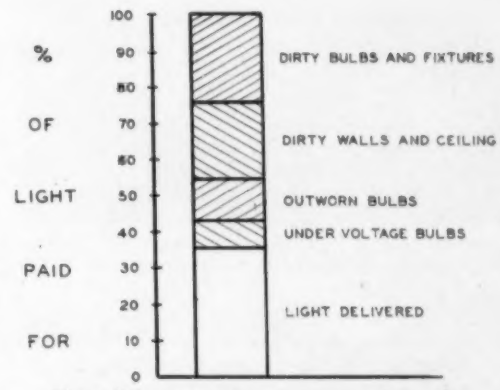
Unfortunately, in many schools at least three of these factors are controlled by the building custodian without specific supervision by any administrator. This is too great a responsibility to leave with the custodian because the visual welfare of children is involved.

Causes of Waste

The accompanying chart shows how the losses from lighting are distributed in a typical schoolroom where maintenance has been poor. Anyone can satisfy himself about the importance of the condition of bulbs and fixtures by reading a light meter placed on a pupil's desk before the fixtures are cleaned, then reading it again after these same fixtures have been washed.

The rated life of an incandescent or fluorescent bulb is an average figure. Some bulbs burn out in less time than others, and many last longer than their rated life. In order to avoid the many extra trips made necessary by haphazard replacement of burnt-out bulbs, many industries use "group replacement." Under this system all of the bulbs in a particular area are replaced after a given per cent of their rated life. Of course, this means throwing away bulbs that are still capable of burning, but it is done with the realization that old and blackened bulbs waste electricity. Group replacement would not be practical in most schools, however, because of the different burning times for different fixtures.

A very common but little appreciated form of waste is found in the use of overvoltage incandescent bulbs. Bulbs of 120 volts give 14 per cent less light when used on a 115-volt circuit and 27 per cent less on a 110-volt circuit. By purchasing bulbs of the proper voltage and, when necessary, having the line voltage raised, the voltages can be brought into conformity. Fluorescent bulbs are not affected so much by voltage, but a change of 1 per cent in line voltage does produce a 1 per cent change in the final output of light.



Cleanliness pays in increasing the percentage of light delivered by school lighting fixtures.

One school system in an eastern city publishes a monthly report which gives the electric light bill for each school building and holds up for emulation those which have low bills. This encourages the janitors to use smaller bulbs than the system was designed for and leads them to turn out lights which should be in use. Although this condition goes beyond the maintenance factors outlined, it is cited as a further example of what can happen with faulty planning and janitor maintenance.

Why Not Lighting Maintenance Crews?

Large industrial plants use trained crews to maintain their lighting equipment, and stores are beginning to use the services of outside maintenance organizations whose crews call regularly for cleaning and relamping. Some school systems are taking a leaf from this book and are having the lighting fixtures cleaned and relamped by special crews from the building maintenance department. This is by far the best solution to the problem, since the men have the equipment and experience to do the cleaning quickly and efficiently, and are able to do it as often as scheduled.

If this plan cannot be used in a given school system, then a definite schedule should be set up for each school and there should be someone in authority who will see that the janitor follows it. A chart hanging in the principal's office is of considerable help. This chart has a space for each room, which the janitor initials when he has cleaned the fixtures.

As to exact schedules and methods, tests with a light meter may indicate different requirements for very clean or very dirty locations, but, in general, it should be satisfactory to wash lighting glassware and metal reflectors with soap and water once in two months. One time saving device is to carry a clean globe or reflector and a clean bulb up the ladder and rest them on the shelf while removing the dirty ones. The clean globe and bulb are put in place and the dirty ones carried down and washed, to be ready for the next fixture. This halves the number

of trips up the ladder. If a spare globe or reflector is not available, the first one removed can be held out and replaced at the end of the job. The type of fluorescent fixture shown in the photograph can either be cleaned as shown or the side panels can be removed and carried down the ladder for cleaning elsewhere.

Correcting Bad Conditions Pays

Dirty walls and ceilings are not so easy to correct. Cleaning helps but if a dark paint with a low coefficient of reflection has been applied, it will reduce the amount of light that falls on the desks. Losses due to dirty walls can be reduced by cleaning washable paints during summer vacation. When it is necessary to redecorate, the use of white on ceilings and light colors on walls and floors will pay large dividends in lighting efficiency and eye comfort.

Lighting is so fundamental to seeing, and seeing to progress in reading and writing and in all study, that its proper use should be of interest to every educator. And when extra lighting can be obtained merely by the methodical use of soap and water, it seems evident that a definite maintenance policy should be established in every school system.

Appleton Industry Helps School Construction

In November, 1945, the Appleton *Post-Crescent,* evening newspaper at Appleton, Wis., carried a full-page advertisement signed by 27 of the leading firms of the community, urging consideration of the school building situation in the community. The signers of the advertisement were the largest taxpayers in the school district who urged an increase in local taxation for the purpose of bringing the local school plant up to the point of efficiency that will enable the schools to offer a well-balanced program of education. The editor of the *Post-Crescent,* in commenting on the advertisement wrote:

"The advertisement set forth a critical study of the grade schools that Appleton presents to its youngsters of eager heart and absorbing mind on their advent into the current of our life. With the declared principle that the children of Appleton should have the best obtainable educational facilities, these Appleton industries literally went through the grade school buildings to see whether the children were getting the fair advantages to which they were entitled. And Appleton industry found its schools laggard where they were not ancient, backward in lighting, backward in ventilation, lacking sufficient accommodations for art and bench work and science, noticeably behind in the steady march to the enlightened goal where children may be brought to maturity as well prepared as possible to serve themselves and to serve their country.

"Investigation had convinced these industrialists that where schools are best practically everything else is best, where schools are best government is best, where schools are best incomes are highest, where schools are best 'more and better homes are built.'

"But not content with merely wishing something fine or speaking of the hopeful, the industrialists took a long stride forward by outlining what appears upon its face to be a reasonable plan to build five new grade schools at a cost of approximately a million and a half dollars and to prepare to carry on that plan by an immediate though reasonable tax levy. No community, except perhaps Long Beach with its oil wells, can digest at one sitting some extraordinary program. But every community can pick out the really important things and keep its sober eyes upon them while it prepares with immediacy for their eventual accomplishment.

"The Appleton industrialists have set an example that contains all the component parts of happy reality. It is practical. It is sensible. It is heart inspiring. And it is unselfish."

THE APPLETON POST-CRESCENT Thursday Evening, November 15, 1945 Page 21

EDUCATION WEEK NOVEMBER 11th to 17th

Industry Examines Appleton's Grade School Buildings

EDUCATION WEEK has proved to be of high value in concentrating public attention on school activities and on the need for new school facilities. Statistics prove that where schools are best, incomes are greatest, more telephones are used, more power is consumed, more magazines and books are read, health is best, more and better homes are built and the percentage of home owners is highest.

We feel that the children of Appleton are entitled to the very best educational facilities obtainable and it is with this object in view that Appleton's industry takes time out to examine our grade school buildings.

Our observations reveal that the average age of our grade school buildings is fifty three years, the oldest being sixty years and the newest thirty nine years. Upon examining the records we find that from 1885 to 1893 that Appleton, with only one half of its present population built six grade schools, all of which are still in use. These buildings do not now, and can not be made, to meet the great responsibilities of modern education.

Industry is constantly building and adding new facilities to meet the greater demand for a higher standard of living. It then follows that education must be provided with modern tools and the very best teaching talent that it can measure up to its responsibilities in building the characters, safeguarding the health, and providing the proper training of and for our young people, enabling them to best meet the demands of our modern society.

Our examination reveals that our grade school buildings have very poor lighting and half of them have poor ventilation. The present buildings have no accommodations for visual education, physical education, dramatics, speech, music and library. There is no available space in the present grade school buildings for health work and pupils must be moved to the Morgan school for the most simple type of immunization program. There is no space for art, bench work, and science, so necessary in the early development period.

We strongly recommend to the Mayor, Common Council and to the citizens of Appleton that the program of the Appleton Board of Education, which calls for the construction of five new grade schools over a period of fifteen years at a cost of $300,000 each be adopted now.

We further recommend that the Mayor and Common Council place in the tax levy the amount of $100,000 each year for a fifteen year period and that the first school be built in three years.

We make this recommendation with the full realization, that as large tax payers, we shall carry a substantial portion of the tax load if the program is adopted.

We are proud of our city, our school administrators and our teachers, and we want to be a part of this very timely and worthwhile educational program.

Keep Appleton Ahead As A Cultural Center, A City of Fine Homes, Schools, Churches and Educated and Responsible Men and Women

Appleton Coated Paper Co.	Fox River Tractor Co.	Valley Iron Works
Advance Car Mover Company	Jos. J. Plank Co.	Knoke Lumber Co.
Appleton Woolen Mills	Fox River Boiler	Wisconsin Wire Works
Appleton Wire Works	Appleton Manufacturing Co.	Badger Wood Plug Co.
Appleton Machine Company	Fuhremann Canning Company	Consolidated Water Power & Paper Co. (Interlake Division)
Appleton Wood Products Co.	Fox River Paper Corp.	Four Wheel Drive Auto Co. (Eagle Division)
Scolding Locks Corp.	Riverside Paper Corp.	Kurz & Root Co.
Standard Manufacturing Co.	Tuttle Press Company	Appleton Juvenile Furniture Co.
Zwicker Knitting Mills	Fox River Valley Knitting Co.	Appleton Chair Corp.

The full-page advertisement which Appleton contributed to the postwar school building campaign.

FINANCE AND TAXATION

► The DeKalb County board of education at Lithonia, Ga. has paid off notes at the bank to the extent of $144,800. All teachers, principals, and employees have been paid up to date. It is anticipated that a loan will be necessary to meet current expenses to the end of the school year.

► Tulsa, Okla. The board of education has sold $4,500,000 in bonds for the white schools, at an interest rate of 1.1739 per cent, the lowest rate ever bid for a local bond issue. The bonds were purchased by Halsey, Stuart & Company, of Chicago.

► Galesburg, Ill. The board of education has adopted a resolution to loan itself $50,000 without interest and repayment not later than June 30. The board finds that it has a surplus in the building fund which can be transferred to overcome a shortage in the educational fund. In other years a scarcity of funds was met by anticipation warrants, purchased by local banks with customary interest rates. It is expected that a considerable saving will be effected under the plan.

► The board of education of Covington, Ky., has adopted a budget of $1,015,283, which is an increase of $13,000 over the year 1945. The budget calls for a $50,000 total instruction increase to take care of the salaries of teachers, educational supplies, and library support.

► East Grand Rapids, Mich. The school board has paid off $17,000 on the school district's bonded indebtedness.

The Ohio Association of School Employees

W. A. Cruickshank[1]

W. P. Ridenour

W. A. Cruickshank

Climaxing eight years of work and recording real progress during the year 1945, the Ohio Association of Public School Employees recently held a convention, in which 65 delegates, representing 3500 men and women in active nonteaching service in Ohio city and rural schools, considered how education in the state might be improved through the betterment of their services and of their status as school employees.

The Association, composed of nonteaching school personnel who are members of one of the state school retirement systems, has as its main purpose to promote the interests of education in the state; to advance the standards of the service rendered by nonteaching personnel; to secure conditions necessary for greater efficiency of nonteaching employees in schools; and to develop and protect an adequate retirement program for its membership.

The Association had its beginnings in 1937, and has carried on under the discouraging conditions brought about by war restrictions and the natural drift from school to war occupations. It is gaining momentum because it is developing in its membership a realization of the importance of their services for the educational program of the schools. The Association was last year a factor in the enactment of the State School Appropriation Bill, under which $111,000,000 was voted for school service. Walter B. Bliss, executive secretary of the Ohio Education Association, has acknowledged the co-operation of the group with the teachers by commenting: "It has been a most pleasant experience to have the employees group render such helpful service, and this has been possible by the increased strength of the organization during the past two years."

Some Association Accomplishments

During the past five years, through its own efforts and in co-operation with other organizations, the Association has increased the representation of nonteaching employees on the state school retirement board from two to three members. Through its activity, school employees who retire will be guaranteed 4 per cent interest on retirement deposits instead of 3 per cent. They will enjoy prior service credit for all public employment whether in the schools or otherwise. Men and women who have been engaged in the work prior to 1937 now receive a 50 per cent allowance for base prior service.

The Association has been effective in reducing the membership fee in the retirement system from $2 to $1 per year, and has assisted in establishing a minimum retirement allowance, as well as an increased disability pension. Through the co-operation of the group, service credit in all three state retirement systems has been co-ordinated.

The Association has been successful in raising the rate of contribution to the retirement system from 4 per cent of a $2,500 salary to 5 per cent of a $3,000 maximum salary per year. Similarly, the prior service allowance has been raised from 1.33 per cent to 2 per cent of the salary for the last ten year of service.

In September, 1944, the Association assisted in effecting the distribution of $8,000,000 among the teachers and other school employees.

The Association is at present seeking to improve the working conditions of all nonteaching employees. This effort proposes that the school boards: (1) allow five or more days of sick leave, with pay, (2) fix a maximum number of hours for the work week; (3) allow payments of salaries to employees who attend summer school sessions, particularly schools for custodians, clerks, secretaries, bus drivers, etc.; (4) accept legislation for a minimum wage scale to be applicable to school employees throughout the state; (5) adopt a tenure plan to provide for nonteaching employees the same security which teachers now enjoy.

The Association has also interested itself in national legislation to exempt retirement income of public employees from income taxes.

Organization of the Association

As a means of insuring local interest and activity, the Association is divided according to the six main geographical sections of the state known respectively as the southeastern, northwestern, northeastern, southwestern, central, and eastern district associations. Each district is fully organized with its own officers, a board of directors, committees, and delegates to the state convention. The directors include one individual from each county in the district.

On a state-wide basis, the Association is also divided along occupational lines so that the special interests of the respective groups are developed. Thus, the Department of School Business Officials embraces the major and minor executives in the field of finance and school-business management. This department was formerly an independent organization and has worked as a department of the general association since 1943. The large number of school secretaries throughout the state is organized in a Department of School Secretaries which has functioned as such since 1944. At the recent 1945 convention, the general assembly of delegates authorized the formation of a department of School Custodians and Maintenance Men.

Each of these departments has a full staff of officers and has a program of meetings at the annual conventions. Plans are under way for the establishment of further departments to include the bus drivers, cafeteria workers, attendance officers, and school physicians and nurses.

Immediate Aims and Policies

At its recent convention, the program of addresses and discussions developed the central thought that the Association must assist in the development of the state's public schools and work for American leadership in world-wide goals. As a group and as individuals, the members of the Association must contribute to (1) greater unity of all educational groups and the future program of education; (2) they must work to improve the public relations of the public schools of Ohio; (3) they must help the movement for the establishment of a nonpolitical state board of education; (4) they must realize as a group and as individuals, that the nonteaching work in the schools is a public service.

In-service education is one of the important means for developing unity among the workers in the public schools. Teachers have long realized that they cannot in youth get their basic training and then drop all contacts with progress in educational thought and method. They must continue their training by professional study during the summer vacation months. In a similar manner, nonteaching employees must continue their self-education in their respective fields if they desire to grow in their jobs and to render an increasingly efficient service such as the general progress of the educational system demands.

The work of nonteaching employees is a public service. Teachers are not working for themselves but for their pupils. So, too, school-business officials, maintenance men, secretaries, and others must realize that their jobs exist only for the welfare of the pupils and for the betterment of the school system. Nonteaching employees must want good schools and must serve well in order to achieve them.

The public will be stimulated to appreciate what the nonteaching groups are doing if the work is so well done that it speaks for them. It is a responsibility of all school employees to seek good will for the schools by better public relations. The future success of education is wrapped up in the type of service which every school employee gives.

Officers for 1946

For the year 1946, W. P. Ridenour, clerk-treasurer of the board of education at Portsmouth, was re-elected president for a third term; as vice-president, the Association elected William H. Hallour, superintendent of school buildings at Toledo; as treasurer, C. T. Eichner, of Columbus, was elected. W. A. Cruickshank, of Cleveland Heights, was made editor of the "Journal" of the Association.

[1]Cleveland Heights, Ohio.

The American
School Board Journal
A Monthly Periodical of School Administration
Edited by
Wm. Geo. Bruce and Wm. C. Bruce

ORGANIZATIONS OF NON-TEACHING EMPLOYEES

RECENT strikes and threatened walkouts of nonteaching employees of city school systems point to the need of clearcut policies concerning the relations of school boards to individual employees and their organizations.

It seems impossible for school authorities to ignore the fact that the organization of school employees is, under the present governmental labor policies inevitable. If groups of workmen in industry are expected by law to have an organization as a means of dealing with employers in setting up working conditions, wages, and other elements of employment, it is only natural that public school employees should seek the same rights and use such means as committees and collective bargaining for bettering their situation. There is hardly a case on record of a school board which has refused to allow its staffs to form an association of their own, to pick representatives from among the school-employed members, and to confer through a committee on problems of mutual concern.

In most states, if any, school boards do not have the legal power to recognize a union, to accept it as the sole bargaining agency of their staffs, or to go so far as to set up elements of the "closed shop" such as compulsory membership of all employees, checkoffs, etc. In this connection the *Kansas City Star* has very clearly presented the legal and public-policy aspects of labor-union recognition by school boards:

> The unions were set up to bargain with private business. In practice this has meant the right to fight by strike of the union itself and by calling on other unions to join in direct or indirect action to tie up the business that is under fire. The well-established goal is to set up the union as the sole bargaining agency for employees in a plant or other business and, wherever possible, to force all employees to join the union and pay dues in order to get or keep jobs. All these rights, real or claimed, assume that the union is a bargaining agency on an equal basis with the employers.
>
> The Board of Education is refusing to recognize any union as a bargaining agent. It has taken its stand on the basis of its own attorney's written opinion holding that the board has no legal right to bargain with a union.
>
> But let the legal questions be argued either way and you still have the main public issue. If a union can bargain as an equal with government, then the government has surrendered part of its authority to one group. No matter how many no-strike promises or other promises are made in the beginning, a recognized custodians' union would gain the same power to close the schools that U. A. W. has to close General Motors.
>
> If public employees have to deal with their employing government through a union organizer or committee they, too, have lost something. Practically they are about in the same situation as the employee in a machine-dominated government who gets his job or reaches the department head through his precinct captain or a political boss. You have another case of divided loyalty and divided authority.
>
> The unions have succeeded in organizing some local governments. And they aren't the only ones that have tried to get a share of government control for one special interest group. But the fact that a principle has been violated in various ways doesn't make it any better or establish a precedent.
>
> Good government represents the whole people and belongs to the whole people. The schools of Kansas City belong to the people of Kansas City. The school board is their sole agent. Necessarily it delegates powers to a superintendent and other officials. But to date the people of this town have never intended to give the board any authority to surrender any part of its powers to a special interest group.

If the organization of school employees is inevitable as seems to be the case, it would appear that school boards may well consider the advisability of supporting, at least indirectly, independent associations wholly limited to school workers. Such organizations may well include every type of nonlicensed personnel and place the advancement of education among their foremost purposes. The Ohio association described on another page seems to have possibilities.

UNESCO AND WESTERN CULTURE

PROFESSOR PITIRIM SOROKIN remarked in a recent address that for rebuilding the shattered culture of the western world a repair job will not suffice. There must be the upbuilding of an entirely new, meaningful, unified cultural system resulting in an integralist transformation of values, of science and religion, ethics and law, philosophy and art. All this must be paralleled by corresponding changes in our basic social institutions, social relationships, and everyday behavior. The integralist culture will regard man as an incarnation of the divine manifold instead of viewing him as a mere organism or reflex mechanism. Man will again become the end value in which the quest for the divine infinite is merged with the finite well-being.

The preamble to the constitution of UNESCO points to international co-operation in education, science, and culture which strives to help the united nations achieve not merely a lasting peace, but a possible rebirth of western culture not unlike that envisioned by Sorokin. The entire constitution and the program of UNESCO deserves a far wider and more searching study than it has received thus far in the larger centers of the country. The notion that the promotion of democracy as a political form will rebuild western civilization and achieve the acceptance of its underlying principles and attitudes throughout the world, must give way to a deeper reexamination of our culture along the lines — we think — suggested for an integralist culture.

SCHOOL PURCHASING

SINCE the onset of the war in 1941, the official purchasing agents of city school systems have been obliged to change their methods of buying and their attitudes toward the school staff members and toward vendors so many times and so rapidly that no phase of any buying program has remained intact except the desire to serve the purposes of education.

From an easy buyers' market in 1940 and 1941 the school purchasing agents have been obliged to change their procedures to apply to the present extreme sellers' market when the greatest shortages exist in every major area of raw materials and manufactured products. With the scarcity of accepted products have come losses in standards of quality, the necessity of finding substitutes and entirely new materials, and the adjustment of the mechanics and the safeguards of actual buying to new lows in orderly and economical public buying. There is ample evidence that the present situation will continue for at least a year to come and that, in some areas, it will persist until the compelling pressure of civilian needs has been met.

The present time is not one of easy or comfortable work for any school buying officer. There is first the necessity of getting full co-operation from the supervisory and teaching staffs to adjust their demands to the times. There can be no recognition of teachers on the elementary or secondary level as research specialists who require special and unusual materials and who have sovereign rights over departmental budgets. There is second the necessity of getting off the office chair to find new sources of supply, to discover vanishing materials, and to adjust the entire thinking of the school group to new and ever changing ideas of value, price, and utility. There is, third, the need for larger appropriations for the supply department so that some reasonable relation can be maintained between the new increased prices and the consumption required for keeping up instructional levels and holding to objectives. There is finally a serious need for

keeping up programs of checking and testing all goods for quality and performance if only to prevent the creeping danger of carelessness and inefficiency. As one school buyer has said the present is a time of making the greatest effort to buy the right article at a reasonable price and of having it in stock when and where it is needed.

ILLINOIS USES SURVEYS

UNDER permissive legislation the rural school boards of the state of Illinois are engaged in an interesting program of surveys as a result of which it is hoped that vast improvements in the efficiency and economy of the schools will be made possible.

Following a campaign of the Illinois Association of School Boards, which had the support of other professional educational organizations, the legislature for the second time enacted in 1945 a law under which school boards of each county are called upon to engage in a survey to ascertain the weaknesses and defects in the administration of the schools. The law is mandatory in that it orders the question of survey for consideration. Whether or not to engage in a survey is optional. The result has been that all but two counties of the state have agreed to make a survey, and many of the studies are in fact under way.

The real purpose of the surveys is to devise ways and means for reducing the number of independent school districts from nearly twelve thousand to a reasonable number based on efficient attendance and administrative units. It is believed that not more than twelve hundred districts are needed and that these will eliminate all the teacherless small schools, will level up local fiscal support, and continue democratic local administration.

The merits of the entire project are found in the fact that it leaves the initiative for reform in the hands of the local school authorities instead of compelling the latter to submit to a central authority. The Illinois legislative experiment ought to be considered in other midwestern states afflicted with plural school districts.

PERSONNEL POLICIES

THE most important aspect of business administration of the past ten years has related to the development of well-rounded personnel policies. School boards have been so concerned with teachers' problems that the difficulties of properly caring for the nonteaching staffs have been very largely neglected.

Mr. John Steven, writing in *California School Business Management*, is absolutely right when he criticizes policies of school boards as arbitrary and inconsistent, particularly in the classification of employees and in the fixing of their wage scales. A committee of the California Association of School Business Officials, in studying the problem, has urged that more intelligent attention be given to the employment of well-ordered, human, and even scientific methods of handling nonteaching employees. Mr. Steven urges that the announced policies of school boards should not be as inviolable as acts of the legislature, but should be subject to periodic review and modification. The classification and the pay rates should be based upon careful job analyses so that full justice may be done.

A well-prepared handbook will answer questions, avoid numerous difficulties, and will bring out the need for correcting undesirable policies. The entire administration of personnel should be democratic in spirit and benevolent in approach.

YES, INDEED, IT IS A MECHANICAL AGE!

WHAT KIND OF A SCHOOL DO YOU WANT?

What kind of a school have you in your community? You will have no better or worse a school than you are willing to fight for and provide. Whether yours is a one-room rural school, a million-dollar institution, or an average school, you as a trustee can find ways of providing better. The youth of your community are entitled to such an effort on your part.

During the months ahead, much will be written and reported on postwar plans. Many communities will want to plan ahead for the reconstruction period when peace returns to the world. But, whatever may be planned, no one at this time can envision the pattern or the demand of the future.

If that is so, we must return to and rely upon the time-tried and tested methods of education over the centuries, and which have arisen and met the needs of each generation. The curriculum might better be simplified, those subjects which are to be taught more thoroughly; and our youth trained in heart and disciplined in mind wherein they are capable of readily fitting into such niche where they eventually will locate. If the foundation or groundwork is really there, the upper stories can be more readily designed, built, and added in later years.—*E. Paul Schaefer, Mt. Kisco, N. Y.*

To Help the School Building Campaign —

Six Million Dollar Pictures

Roscoe H. White[1]

Do you face the somewhat difficult task of convincing a tax weary public that they should vote upon themselves an additional tax burden to provide more and better buildings and equipment for their schools? The problem has been successfully met in a somewhat unusual manner in the Shreveport school system. In early September, 1945, the parish school board decided, after careful study, that $6,250,000 was needed to provide proper buildings and equipment for the Negro and white schools under its jurisdiction. With many misgivings and doubts about the final outcome the board decided to submit the questions to the decision of eligible voters. In Louisiana tax and bond elections are double barreled affairs: they must have a majority in both popular and property vote in order to pass.

In anticipation of a bond election plans were begun in the summer of 1944 for presenting the need to the public. After canvassing all of the known means of informing the public on such matters, it was decided to use as the chief means of informing the public, a combination of photographs of actual building conditions together with charts showing the statistical need for new buildings. It was also decided to tell the complete story of need with special reference to the Negro schools. Accordingly photographs of the types shown in this paper were taken in the spring. Charts of the types illustrated were also prepared. It was decided to use the two in opaque projectors, to give illustrated talks over the city to any civic group willing to listen.

When the board took the first official step in September, it was not unexpected by the public since local news stories had appeared in the press from time to time about school building needs. There was, however, a quick reaction against the request for a short time on two grounds: too much was being asked for and too much was going to Negro schools. Board members and I were prepared to answer this criticism by means of an illustrated lecture.

In January, 1944, the Caddo Parish school board recognized that basic changes and improvements in the school system would have to be brought about during and after the war. It accordingly appointed a Citizens Survey Committee, headed by one of the city's outstanding citizens, Mr. M. L. Bath, and assigned to the committee the task of making a study of the local schools and reporting its findings back to the board. This committee worked in close co-operation with the administrative office and with all schools. After 14 months, its report was rendered in March, 1945, to the parish board and the committee was dissolved. Its report contained recommendations for buildings and equipment which became the basis of the September action of the board.

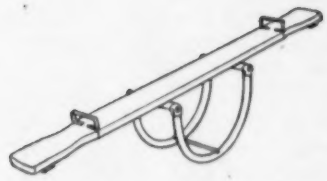
It was therefore possible, when the series of illustrated lectures on building needs began, for board members and the superintendent to say to audiences that it was not our program but rather that it was their program proposed by their own fellow citizens who had no official connection with the schools. In these lectures emphasis was placed only on our obligation to provide facts about the schools as observed and reported upon by the Citizens Survey Committee and our intention to avoid in any manner trying to tell anyone how to vote. The first such lecture was delivered to one of the city's largest civic clubs whose membership is made up of the city's most important business and professional men. The

(Concluded on page 60)

[1]Superintendent, Caddo Parish Public Schools, Shreveport, La.

This picture of a girls' health class located in the lobby of the auditorium of another white high school, showing poor lighting as well as poor location, was very effective in the campaign. Pictures of similar conditions in other schools were given the closest of attention by audiences.

Left: a crowded Arts and Crafts room in one of the white high schools. Center: an overcrowded Home Economics room in a Negro high school. Right: an overcrowded English class in a Negro high school. These pictures were instrumental in the public being willing to abandon the present Negro high school and providing funds for the erection of a new high school for Negroes.



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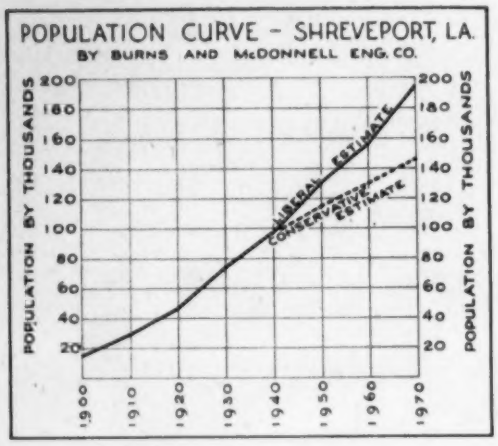
(Concluded from page 58)

reaction against the bond proposal was short lived. "Seeing is believing" and these businessmen as quickly saw the need as had their fellow citizens on the Survey Committee. Board members and officials from the administrative office teamed up to give thirty similar lectures throughout the parish and to the widest varieties of citizens.



At the proper time as the program advanced, the two daily papers of the city aligned themselves squarely behind the proposal editorially and in their news columns. Beginning a week before the election, daily front-page news stories appeared. Facts for these came out of the Citizens Survey Report.

Every local PTA unit in the school system was completely and efficiently organized to get out the vote and to support the program. Each area was completely covered with poll watchers at each voting precinct on election day, November 27. Get-out-the-vote committees stationed at each school received their reports and took the necessary steps to get people to the polls who had not voted. The three radio stations of the city teamed up with the PTA on election day in this get-out-the-vote effort.

The result? It was far beyond the fondest hope of anyone. A majority of 6 to 1 property vote and nearly 11 to 1 popular vote was piled up in favor of the bond proposal. In achieving such heavy majorities the electorate placed heavy responsibility on the school board and the superintendent and his staff to see that the very best will be provided in physical facilities for the children. The powerful lesson learned about taking lay citizens into the confidence of the board and its executive staff will not be lost sight of. The lay citizen is not yet through. He will have a very important part to take in helping to plan the details of the buildings he has voted to provide. Citizens, board members, teachers, principals, and the administrative staff are planning together for the actual buildings just as they planned and worked together in the effort to provide the funds for them.

FAIR PARK HI BUILDING NEEDS

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Swimming Pool
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Added space for Vocational Education
Remodel space for Vocational Education
Equipment for Vocational Education
Proper accommodation for R. O. T. C.
Add to Boiler Room Equipment
Replace Auditorium Heating

Postwar School Building Problems

W. J. Springer[1]

Many school systems throughout the United States have been faced with serious problems resulting from the war. It is not my purpose to dwell upon those problems confronting the communities which have experienced a mushroom growth, due to the opening or closing of a war industry, but rather to discuss the questions common to the normal, growing communities, and particularly suburbs of large metropolitan cities.

For a number of years it has been the universal tendency of families to move to the outskirts of the city where they may maintain a less crowded and more enjoyable home, at the same time continuing their business or professional connections in the city. Although the demands of war made commuting more difficult and decreased the leisure time of the individual, the natural desire for a suburban home has increased with the burdens of war. Millions in the armed forces dreamed of the happy days when they could marry or reunite with their families and establish a new home in the country or at the edge of a city.

Communities which have given some thought and attention to planning, zoning, building restrictions, etc., are now in most favorable positions.

The most intelligent approach by a board of education to the question of future building needs would seem to involve these steps:

1. *Make a complete survey* of your school district and related areas in order to ascertain its present and possible future growth. (*a*) Engage the most competent specialist available for this purpose. (*b*) This specialist should review his findings with the board of education.

2. *Select a competent school architect* to prepare preliminary plans of your building needs. (*a*) The architect's fees (usually 6 per cent) should not be overlooked as part of the total. (*b*) The board should be satisfied that the architect's fees are conservative and that a reasonable amount should be included for contingencies, such as fluctuating costs and improvements. (*c*) Have an agreement with the architect that all financial considerations are contingent upon the successful passage of the bond issue.

3. *Estimate the combined costs of sites, building, and equipment.* Compute the sum of the present bonded indebtedness, and the proposed improvements. (In Ohio this sum may not exceed 4 per cent of the valuation in the school district, unless your request is presented at a hearing, in which case they may grant up to a 6 per cent maximum.)

4. *Employ the most widely recognized legal specialist* in the area to help the board of education prepare resolutions and other necessary steps, in chronological order, for bond issue requirements. If the board prefers, the county prosecutor or city solicitor, as the case may be, may render this service. However, most bond firms require the approval of such a specialist before purchasing the bonds, which makes it advisable to secure this service at the outset.

5. *Select a responsible real estate man* (preferably with legal training) to negotiate land purchases, if you do not already own the necessary sites. Land purchases for future buildings should be made in such a way as to insure pupil distribution within walking distance to the nearest school. This eliminates the need for bus transportation and cafeteria service in future schools.

6. *Give careful consideration to drainage, sewage disposal, water supply, and soil conditions,* upon selection of a building site. In some cases it is wise to engage the services of a surveyor or landscape architect, or both.

7. The remaining steps are contingent upon conditions prevalent at the time, such as building requirements, building costs, scarcity of materials, availability of federal aid, etc. When federal aid is under consideration, the school boards should try to keep constantly informed by their own Congressmen and not depend on hearsay or newspaper reports.

The Need for Experts

It must be remembered that school board members seldom have had previous building experience. Quite often the superintendent of schools has never gone through such a program. All the more reason why competent specialists should be employed if a comprehensive, suitable building program is to be achieved.

For an inexperienced board to blunder along, without adequate professional advice, is a case of being "penny wise and pound foolish." Often mistakes and omissions are overlooked until too late to rectify the damage done. Public servants are entrusted with the responsibility of using funds of the school district to the best advantage.

From a number of angles it seems wise to advertise for building bids in January or February so that contracts may be let by the first of March, when most of the new rates for the various trades have been established. Current building costs are higher than at any time in American history, due to costs of labor and materials. However, a recent survey by a near-by school system revealed that 1946 building costs are almost identical with those of 1930, when interest on the bonds are taken into consideration. The recent $280,000 bond issue for the Bay Village Schools was sold at an average yield of 1.34 per cent as compared with 6 per cent interest on the last school building constructed in 1927.

---

[1]Supt. Schools, Bay Village, Ohio.

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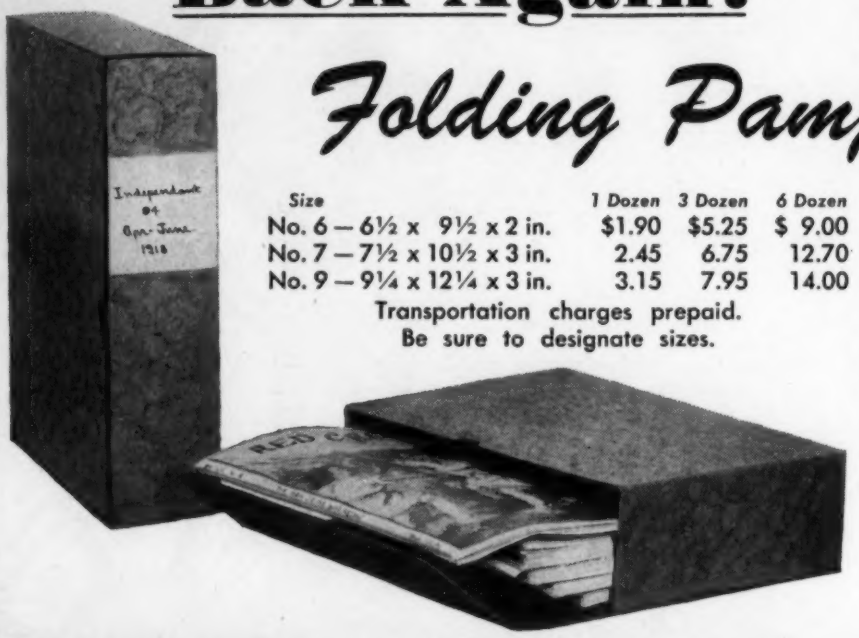

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School Law

Schools and School Districts

School districts in Texas are "quasi public corporations" and they are "state agencies," elected and employed for the purpose of administering the state's system of public schools. — *Wilson* v. *Abilene Independent School Dist.*, 190 Southwestern reporter 2d 406, Tex. Civ. App.

A school board may make such rules as in its judgment are necessary to maintain an "efficient" system of schools, subject to the limitation that there be no abuse of discretion and that such regulation be not arbitrary, unreasonable, or in violation of the law. Vernon's annotated state constitution, art. 7, § 1. — *Wilson* v. *Abilene Independent School Dist.*, 190 Southwestern reporter 2d 406, Tex. Civ. App.

The question as to whether an ordinance or a regulation of a school board is reasonable is a "question of law," for the courts on direct appeal, without first prosecuting an appeal through the school authorities. Vernon's annotated civil statutes, art. 2656. — *Wilson* v. *Abilene Independent School Dist.*, 190 Southwestern reporter 2d 406, Tex. Civ. App.

School District Property

Under a California statute making school buildings available as centers for community activities, the board of education may not only make reasonable regulations with regard to the use of the school auditorium for authorized purposes, but may deny an application for its use if such use would further the overthrow of the present government of the United States by force or violence or other unlawful means or would interfere with the use and occupancy of a public schoolhouse and grounds as required for the purpose of public schools. Calif. statutes of 1943, p. 690, §§ 19431, 19433; and § 19432, as amended by the Calif. statutes of 1945. — *Payroll Guarantee Association* v. *Board of Education of San Francisco Unified School Dist.*, 163 Pacific reporter 2d 433, Calif.

The fact that a proposed public meeting in an auditorium of a public school building might interfere with schoolwork would justify a board of education in denying an application for the use of an auditorium on a school night. Calif. statutes of 1943, p. 690, §§ 19431, 19433; and § 19432, as amended by the Calif. statutes of 1945. — *Payroll Guarantee Association* v. *Board of Education of San Francisco Unified School Dist.*, 163 Pacific reporter 2d 433, Calif.

Under an Iowa statute, the directors of a school district were authorized to lease a vacant school building to a society to be used for community house purposes without submitting the question to the electors. Iowa code of 1939, 4217. — *McLang* v. *Harper*, 20 Northwestern reporter 2d 454, Iowa.

School District Claims

The evidence that work being done by a Jewish organization in a vacant school building, with the permission of the directors of the school district, was of a community nature, and that the community center as operated by the organization, was open to the general public, established that the organization was not one which could be denied the right to use the school building on the ground that the building was being used for sectarian religious purposes within the prohibition by statute. Iowa code of 1939, § 4371, as amended by the Iowa laws of 1941, C. 166. — *McLang* v. *Harper*, 20 Northwestern reporter 2d 454, Iowa.

Teachers

A teacher may be assigned to a designated school by the county superintendent of schools and the board of education before commencement of the school year and, when so assigned, may not be removed from such school until the next annual assignment of teachers, in the absence of a necessity for such action as a regulatory measure or the existence of an emergency. W. Va. laws of 1933, 1st Ex. Sess., c. 8, art. 5, § 4; W. Va. laws of 1941, c. 33, art. 4, 10(3). — *Weaver* v. *Board of Education of Calhoun County*, 35 Southeastern reporter 2d 679, W. Va.

The West Virginia statutes, providing for annual assignments of teachers to designated schools, confer no right on the teacher to compel the county board and superintendent to re-assign him to a school in which he taught during the previous school term, or to any other particular school in the county. W. Va. Laws of 1933, 1st Ex. Sess., c. 8, art. 5, § 4; W. Va. laws of 1941, c. 33, art. 5, § 10(3). — *Weaver* v. *Board of Education of Calhoun County*, 35 Southeastern reporter 2d 679, W. Va.

Pupils

A Texas school board, under its authority to adopt regulations for the well-being of the school, may deny to pupils belonging to a secret fraternity, contrary to school rules, the right of participating in certain activities, although the meetings of the fraternity are held outside of the schoolhouse, after school hours and with parental consent, where it is shown that such societies have a tendency to destroy good order, discipline, and scholarship. — *Wilson* v. *Abilene Independent School Dist.*, 190 Southwestern reporter 2d 406, Tex. Civ. App.

The superintendent, principal, and board of trustees of a public free school, to a limited extent, stand as to pupils attending a school, in *loco parentis*, and they may exercise such powers of control, restraint, and correction over the pupils as may be reasonably necessary to enable the teachers to perform their duties and to effect the general purposes of education, and the courts will not interfere with such matters, unless a clear abuse of discretion is made to appear. — *Wilson* v. *Abilene Independent School Dist.*, 190 Southwestern reporter 2d 406, Tex. Civ. App.

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School Building News

A BRITISH VIEW OF PRIMARY SCHOOL FACILITIES

The renewed activity in the erection of new school buildings in Great Britain has led a members' committee of the National Froebel Foundation to prepare a memorandum on the facilities needed in kindergartens and junior forms (primary grades). A summary of the statement in the *London Times Educational Supplement* suggests that in the committee's opinion,

It is generally accepted now in theory, if not in practice, that education of junior children —*i.e.*, of children between the ages of 7 and 12, should be gained through activity and experience rather than through the passive learning of facts and storing of knowledge. First and foremost, activity demands space, and the prime need for junior children, as for those much younger, is room to move about and do things. A suggested ruling is that each classroom should provide twice as much floor space as is needed for the children to be seated comfortably at desks or tables. Each room should have easy access to cloakrooms, with hot and cold water, to storerooms, and to out of doors. An excellent plan is one where classrooms open on to a corridor or verandah, and are separated from each other by a cloakroom or large storeroom.

Within the room, tables and desks should be light and easily moved, and with some variation in size. If desks are used they should be flat topped so that several can be put together to form tables where children can work in groups and on which ordnance maps, etc., can be spread.

Other permanent equipment for each room should include a sink with water laid on, a carpenter's bench, bookshelves for a library corner, ample cupboards (some with flat tops), and one or two firm tables for setting out models. There should be electric points for radio and simple experiments, and plenty of notice boards for wall displays. Each junior school should have at least one extra room, and larger schools more, which can be used for specialist work, or for more general or group work.

Outside space is as important for outdoor study as for formal and informal games and exercise. Flower beds and grass should be near the building, and asphalt for physical training away from it, to lessen disturbance from noise. In addition, there should be some rough space where digging and building can be carried on, kilns set up, and large-scale models laid out.

In equipment, staffing, and general amenities junior schools should not fall below the best modern standards for any schools. This implies proper sanitation with hot and cold water, a school hall with stage and lighting, a dining room which does not have to be cleared for other purposes, a gymnasium with changing rooms and apparatus for the climbing and agility work so necessary for juniors.

The committee hopes before long to plan further work on the subject of junior school buildings by means of a conference or an exhibition. Anyone with comments or suggestions to make is asked to get into touch with the secretary, Members' Committee, National Froebel Foundation, 2, Manchester Square, W.1.

STATE AID FOR SCHOOL BUILDINGS

A Public School Building Commission was established in Connecticut in 1945 to administer an appropriation of $2,000,000 to aid towns in building new school buildings. The Commission comprises Frederick H. Holbrook, of Madison, Carl M. Sharpe, of Pomfret, and Prosper Lavieri, of Barkhamsted. Commissioner Alonzo G. Grace is ex-officio a member.

The law provides that "any town desiring to build, remodel, or enlarge any school building" may, by the prescribed process, "apply to the Public School Building Commission for state aid for such purpose."

The Commission may grant aid on a per-pupil basis, not to exceed $150 per pupil, and not to exceed $50,000 for any town. Only one project may be approved for a given town in a two-year period.

The law provides substantial aid, even for towns with small enrollments, although very few towns will qualify for the full $50,000 since to qualify would require a building project for at least 333 pupils at, or above the maximum of $450 per pupil.

Architectural plans for state-aided projects must be approved by the Commission before aid is granted.

HUTCHINSON BUILDING PROGRAM

The board of education at Hutchinson, Kans., held a public school election on February 4, 1946, at which the voters approved a proposal for a ten-year building program, to cost an estimated $1,330,000.

A supervised recreation program was carried at the same time. Both programs owe their successful conclusion to the publicity program carried out by the board. This program included public meetings, newspaper articles, radio speeches, and a special issue of *The High School Buzz*, which was distributed to all homes in the district.

ADOPT NEW ARCHITECTS' CONTRACT

The board of education at Philadelphia, Pa., has adopted a standard form of contract to be used in engaging the services of architects for the planning and construction of school buildings. The services to be provided include: (1) the preparation of preliminary studies, working drawings, and specifications, and to certify estimates of work completed by the respective contractors; (2) to furnish preliminary estimates of costs of the various contracts when requested; (3) to provide the working drawings and specifications within a time limit agreed upon; (4) to prepare plans and specifications for decorative and landscape work; (5) to alter and amend or add to plans as may be directed as the work progresses; (6) to supervise the opening of bids; (7) to attend necessary conferences; (8) to follow standards established by the school board; (9) to employ engineers for necessary services, etc.

The board of education will compensate the architects, at the rate of 6 per cent for the total cost of the work, including the heating, electrical, plumbing, and ventilating contracts. A total of three fifths of the commission payable is to be tendered upon award of the contracts.

NEW BUILDING PROGRAM FOR DALLAS, TEXAS

The board of education at Dallas, Tex., has recently approved a proposed $10,000,000 school-building program, which is to cover a ten-year period. Under the program, the board will from year to year determine which projects demand immediate attention, and will make decisions as to which buildings must be undertaken at various times. For the present, the board will limit itself to the construction of a new South Dallas Junior High School and to the construction of a sufficient number of elementary schools to take the children out of temporary structures. At least 8 elementary schools will be erected, and 14 additions to buildings will be constructed. A new senior high school will be erected to accommodate 1200 students.

SCHOOL BUILDING PLANNING CONFERENCE

Indiana University held a school building planning conference, February 5 and 6, at Bloomington. The meetings were under the direction of H. E. Moore, and the list of speakers included Col. Francis R. Scherer of Rochester, N. Y., and Don L. Essex of Albany, N. Y.

► Roy E. Simpson, of South Pasadena, Calif., has been named State Superintendent of Public Instruction, to succeed the late Dr. Walter F. Dexter.

School Administration News

PROGRESS OF SCHOOLS AT LONGVIEW, TEXAS

During the school year 1945-46 the public schools of Longview, Tex., have been engaged in carrying out three important school activities.

During the year plans were begun for the construction of a 15-room elementary school. The building is now under construction and will be completed in the early spring or summer.

A second activity has been the preparation of a revised curriculum program for the elementary schools. The curriculum study includes four counties in and around the surrounding district and is tied up with the state-wide program.

A third activity has been the preparation of an evaluation plan for the elementary schools. Dr. Henry Otto, of the University of Texas, has been employed as co-ordinator, and will be in charge of the several meetings to be held during the year.

HAMILTON ADOPTS RULES

The board of education of Hamilton, Ohio, has adopted new rules and regulations for the administration of the schools. The rules include (1) duties of the board of education, (2) administrative organization, (3) appointment, assignment, and transfer of employees, (4) schedules of teachers' salaries, (5) schedules of nonteaching employees, (6) leaves of absence from duty, compensation, and relations, (7) health examinations, (8) pupils, (9) use and rental of school facilities, (10) miscellaneous regulations. It is interesting to note that the rules include legal and practical definitions of departments, services, and employees, and that the spirit of the entire rules is that of facilitating the work and the relations of a serious, competent, but entirely friendly group who have an important job to perform. The emphasis is on commonsense ways of doing the jobs rather than on prohibitions. The original draft of the rules was drawn by Supt. Terry Wickham with the cooperation of the board and members of the teaching and nonteaching staffs. The book is in loose-leaf form so that revisions can be inserted as needed and obsolete rules removed.

ELECTRA SCHOOLS REVAMPED FOR THE POSTWAR PERIOD

During the school year 1945–46, the public schools of Electra, Tex., under the direction of Superintendent Bob Lindsey, were revamped in order to place new emphasis on departments and activities dropped during World War II. An attempt has been made to extend the school program, and in some phases to add to it.

Six different phases of the program have been emphasized during the year as follows:

Music. The band director has been employed on a twelve months' basis. Two bands have been organized, one for the senior high school and one for the junior high school, as well as two glee clubs.

Visual Education. The board has purchased three 16mm. motion picture projection machines, two beaded portable screens, and two tri-purpose still-film machines. All members of the faculty have been taught to operate the machines, and a film library has been set up in each building.

Lunchroom. A staggered lunch hour has been introduced to accommodate all buildings. A new cafeteria has been installed in one of the elementary buildings.

Athletics. Volleyball tournaments have been arranged for this area and track teams will participate in interscholastic league meets. A coach has been provided for the junior high school.

Clubs. In the senior high school the National Honor Society and the Quill and Scroll have been revived. A Cue and Curtain Club has been formed, and the student body is revising the Student Council constitution. Student assemblies are being conducted regularly each week during the school year.

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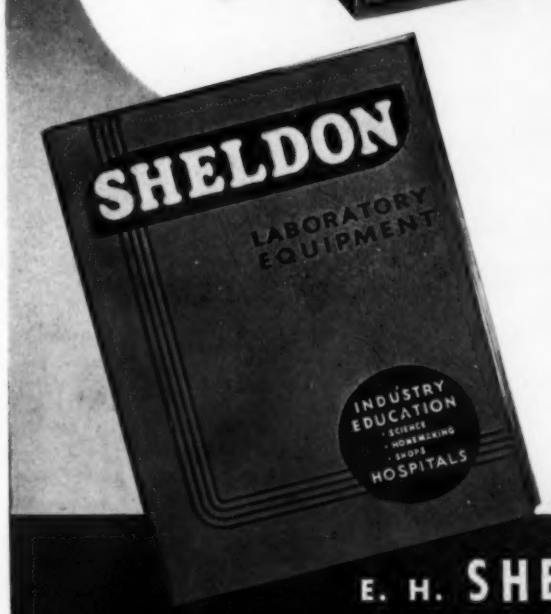

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Metal Shop. A building has been obtained from the city and a number of government-loaned metal-shop machines installed to operate two 3-hour metal-shop classes for senior high school students.

The senior high school is keeping a file of information concerning the granting of credits to returned servicemen.

INNOVATIONS AT DALLAS, TEXAS

With the opening of the school term in September, 1945, the board of education at Dallas, Tex., established the Dallas Vocational School for returned war veterans. At the present time, 477 men have been enrolled, 135 of whom are registered in the academic section. In order to help returned servicemen to complete academic requirements for high school diplomas, the board has set up an accelerated program of studies which enables a man to make rapid or slow progress in his studies as his ability and industry permit. For instance, during the month of December, one young man completed a semester's work in algebra.

All of the men are serious in their work and the board feels justified in allowing them to make as rapid progress as possible. Classes are offered in such subjects as refrigeration, radio, electrical appliances, auto mechanics, furniture repair and upholstery, air conditioning, and machine-shop work. The school is being maintained through funds paid as tuition by the Veterans Administration, supplemented by funds from the state and federal government through the Smith-Hughes law.

A class in eyesight conservation was started in

WHEN SCHOOL MEN PLAN LIBRARIES . . .

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September, 1945, under the direction of a special teacher trained for that work. The class, housed in one room of an elementary school, has special lighting and furniture. Books and other materials are printed in large-size type. The pupils enrolled range from beginners through the ninth grade.

The board also maintains classes for crippled children. In January, 1947, the board plans to have a building ready to house these children. Buses will pick up the children, bring them to school, and take them home in the afternoon.

ARKANSAS TO REDUCE SCHOOL DISTRICTS

The state of Arkansas is considering this year the elimination of small school districts. In order to do this the voters will have an opportunity in the fall to vote to run the schools through county school districts, and to merge into county systems all districts with fewer than 400 enumerates, who are between the ages of 6 and 16 years.

It is estimated that the state has only 300 districts large enough and financially able to maintain high school programs. While payment of tuition to another district with a high school is optional, few country schools send children to a high school under the law.

State Commissioner R. B. Jones estimates that 200 schools in isolated areas have been closed for lack of teachers. There are 800 vacant rural positions, due to the salary situation, which has compelled the discontinuance of certain subjects and services in the schools.

HEALTH IMPLICATIONS OF PHYSICAL-EDUCATION PROGRAM

The Joint Committee on Health Problems in Education of the N.E.A. and the American Medical Association, at its 1945 meeting, adopted a statement on health implications of the physical-education program and health policies related to the program.

The program which contains four main points of procedure aims to insure certain health benefits through definite policies to be observed in the conduct of physical-education programs. The more important policies in brief are:

1. *General Health Policies.* A pupil should be assigned only to activities in accordance with his entering or subsequent medical examination.

2. *Special Policies.* Pupils in the elementary schools should have sufficient physical activity (4 to 6 hours daily) to contribute to normal growth and development. A minimum of two 30-minute periods, one in the morning and one in the afternoon, is recommended — one for instruction in physical-education activities, and one for supervised play activity.

3. *Special Policies for Secondary Program.* Students in secondary schools should have sufficient physical activity to insure the maintenance of good health. The daily period should be of such duration as to allow students to have sufficient time to change to appropriate clothing, to have a minimum of thirty minutes of activity, and to take a shower.

4. *Policies for Interschool and Intramural Programs.* Interschool athletic leagues should be confined to the senior high schools. An extensive program of intramural activities is recommended for both boys and girls in the junior high schools. Interschool activities should be limited to occasional invitational meets or games. Each athlete should have a medical examination at the beginning of the training season for each competing sport in which he participates and should be referred to the school medical adviser if he presents signs of abnormal health.

COMPLETES COST STUDY OF SUBURBAN SCHOOLS

On behalf of the board of education of Elmhurst, Ill., W. C. Jackman, superintendent of schools, has completed a cost study of the Chicago West Suburban (Cook County) schools. The study which was made to determine cost increases for the period since 1940–41, included the schools in the cities of LaGrange, Naperville, Arlington Heights, Bellwood, Argo-Summit-Bedford Park, Lyons, Riverside, Desplaines, Park Ridge, Elmhurst, Berwyn, and Maywood.

The average increase in the educational fund (A.D.A.) was $19.27, and for the building fund $3.14 (A.D.A.). The corresponding cost estimates, based on enrollment figures, were $15.43 for the educational fund, and $4.36 for the building fund.

The highest total per pupil A.D.A. cost of a school in the group was in 1944–45, per pupil cost in the educational fund of $197.70, and in the building fund of $10.84. The lowest total cost was in a district where the cost in the educational fund was $92.19, and in the building fund $4.09. The median total cost was in a district which had a cost of $106.10 in the educational fund, and $19.34 in the building fund.

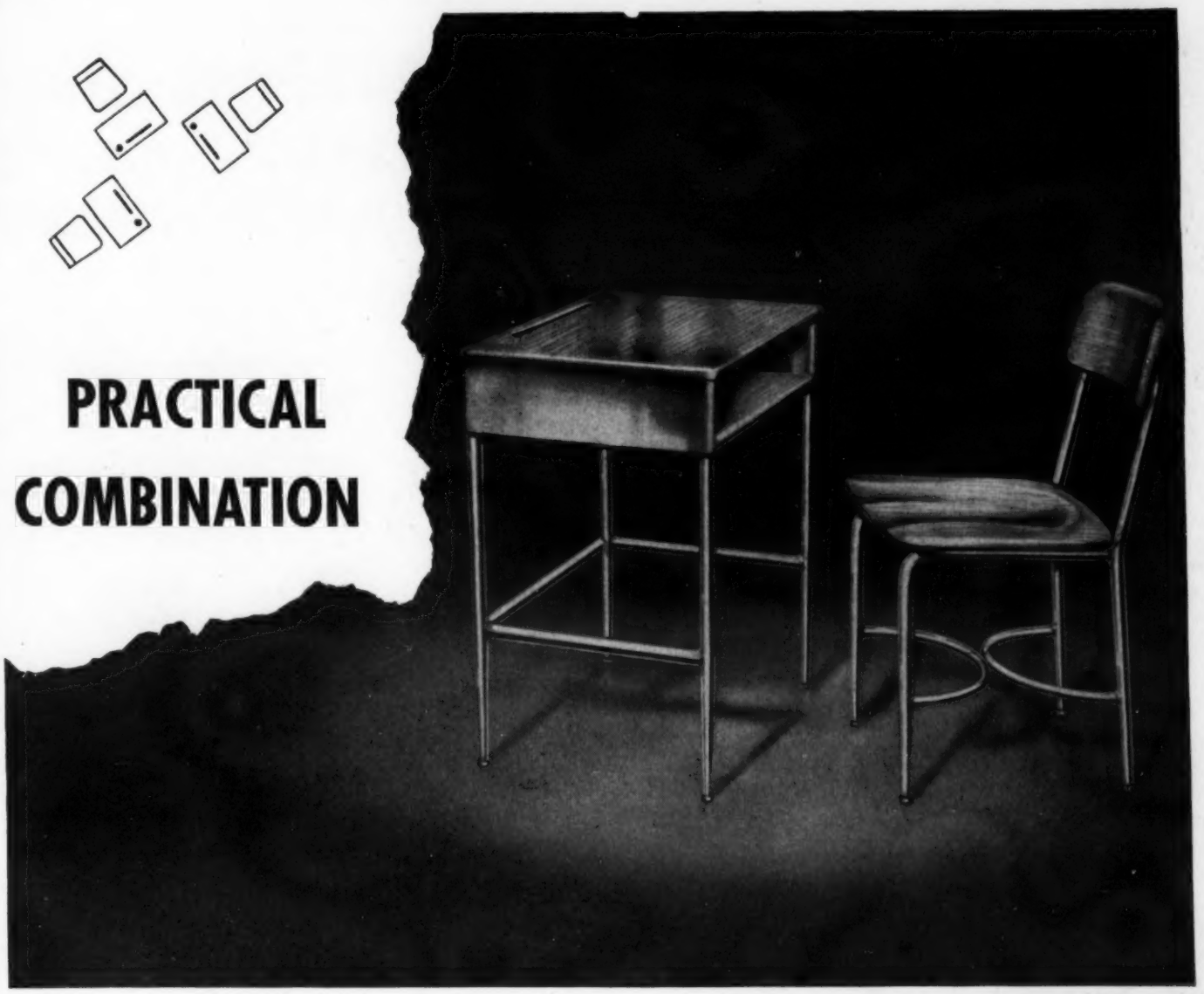
TRAINING SCHOOL FOR CUSTODIANS

The state board of education of Connecticut has announced its plans for the 1946 summer session of the training school for school custodians in Hartford. It is planned to set up the work in the form of work projects for the 23 work areas considered necessary in a well-rounded educational program. This will be in addition to lecture and discussion periods. Each of the work projects will be under the direction and supervision of an expert with years of experience in the particular area. The training classes will be in session from June 24 to 29, inclusive.

The program is under the direction of Coston C. Crouse, director of public service training, state department of education.

PROGRESS AT BAY CITY, TEXAS

The board of education of Bay City, Tex., has outlined an extensive postwar program, involving (1) an improved school curriculum, (2) better teachers' salaries, (3) improved school libraries, (4) planning of a school-building program, (5) the establishment of a closer contact between the schools and the parents.



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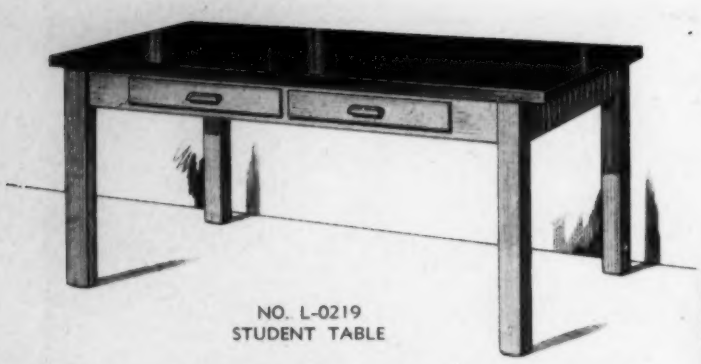

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Teachers' Salaries

COLORADO SPRINGS ADOPTS NEW SALARY SCHEDULE

The board of education of Colorado Springs, Colo., on October 10, 1945, adopted a revised salary schedule for teachers. The plan, which became effective January 1, 1946, is the first improvement in the salary program since 1941. It provides for an average staff salary of $2,324 in 1946, as compared with a salary of $1,985 in 1941. Among the factors effecting the change are (1) the regular increment schedule which has been maintained; (2) an adjustment to the new schedule adopted in 1944; (3) the double increment which was granted in January, 1946; and (4) an increase in the maximum salaries for different classifications.

The maximum salaries as established for the various groups range from $1,560 for Group I to $2,400 for Group VIII.

New appointees entering the system must remain at their initial salaries until a year from the following January and will be appointed at the following salaries: Teachers with no experience, A.B., $1,500, and M.A., $1,600; one year of experience, $1,550 and $1,650; two years' experience, $1,600 and $1,700; three years' experience, $1,650 and $1,750; four years' experience, $1,700 and $1,800; five years, $1,750 and $1,850; six years, $1,800 and $1,900.

HILLSIDE SALARY GUIDE

Teachers' association, a committee of the board of education, and Supervising Principal Wayne T. Branom, of Hillside, N. J., have presented to the board of education a salary guide which is the result of a year's work on the part of this group. The salary guide, which has been accepted by the board may be changed, amended, revised, or abrogated by the board at any time, is not to be considered as a contract between the teacher and the board.

Teachers are divided into four classes: Class I, teachers without a degree; Class II, teachers with a bachelor's degree; Class III, those with a master's degree; and Class IV, those with one year advanced training beyond the master's degree. Teachers without a degree will begin at $1,400 a year, and advance to a maximum of $2,800 at the end of 15 years' service. Teachers with a bachelor's degree will be paid a minimum of $1,500, and increments of $60 up to the fourth year, after which increments of $100 will be paid to the maximum of $3,200 in the nineteenth year. Teachers with a master's degree will begin at $1,600 a year, and increments of $60 up to the fourth year, after which increments of $100 will be paid to the maximum of $3,400 in the twenty-first year of service. Teachers in the fourth class, with one year of advanced training beyond the master's degree, will receive a minimum of $1,700, and increments of $60 up to the fourth year, after which they will be paid increments of $100 to the maximum of $3,600 in the twenty-second year of service.

Under the rules, experience gained in any school system, or in fields of work closely related to the prospective assignment in the school will be evaluated by the supervising principal, with the approval of the board.

Teachers' salaries will be classified according to their teaching experience in the schools, and the training level set up in the guide.

Teachers employed prior to July 1, 1945, will not for the present be placed at the exact step and training level called for under the provisions of the guide, but the adjustment will be made over a period of five years.

Not more than 12 semester points, approved by the supervising principal and earned in an accredited college, may be applied toward advancement in any one school year.

Adjustments in salary, necessary because of a change in the years of training, must be made at the usual contract time, except that those who qualify during the summer months for higher salaries because of additional training completed after the regular contract time, will receive revised contracts during the month of September.

Teachers who have completed 25 years or more of service in the public schools, and who have met all requirements, will be placed on the maximum salary for their classification at the beginning of the school year succeeding such completion.

To qualify for regular increments, teachers must have taken (*a*) three points of credit or equivalent approved courses not offering points from 1941 to September, 1947; (*b*) after September 1, 1947, all teachers must earn three points or take equivalent approved courses within each succeeding three-year period of teaching. All points earned must be approved by the supervising principal.

All teachers who have taught in the schools 15 years or more, and who have earned 128 college points prior to September 1, 1946, will be placed in Class II of the salary guide.

DAVENPORT ADOPTS COST-OF-LIVING ADJUSTMENT PLAN FOR TEACHERS

The board of education at Davenport, Iowa, has adopted the Milwaukee Plan for cost-of-living adjustments beyond the basic salary schedule. During the past several months the board had conducted an intensive study involving changing economic conditions. As a result of the study, the board proposes to pay a cost-of-living adjustment to each employee above the scheduled salary, similar to the Milwaukee Plan, up to a maximum of $300 for the year beginning

(Concluded on page 72)

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(Concluded from page 70)

July 1, 1946. This plan will not be fully operative until 1947-48 when adequate funds will be available.

The present basic salary schedule will be retained. Persons who are not at the maximum will receive automatic increases to the maximum in the same manner as in the past. The present basic maximum for high school men is $2,600 for those with an M.A. degree, which will make the maximum $3,040 in 1947. For women it will be $500 less in the secondary schools, and $2,400 in the elementary schools.

The cost-of-living adjustment, which is based on the Consumers' Price Index, published by the Bureau of Labor Statistics, to be paid monthly or semimonthly, is computed by multiplying the actual annual salary up to a maximum of $1,620, by the variation from 100 of the published index for Milwaukee. Thus, if the budget for 1947-48 had been made up as of January 15, 1946, the cost-of-living adjustment for a person earning an annual basic salary of $1,300 would have been $345.80 ($1,300 × .266). For an employee earning an annual salary of $2,000, the adjustment would have been $430.92 ($1,620 × .266). For a part-time employee whose annual salary was $700, the adjustment would have been $186.20 ($700 × .266).

A memorandum, signed by the president and the secretary, will be issued each year to each employee stating the amount of the adjustment and the method of payment to be made monthly or semimonthly.

TEACHERS' SALARIES

► Minneapolis, Minn. The board of education has approved a new schedule of teachers' salaries, prepared by Supt. Willard Goslin. The schedule, which is intended for incoming teachers with the minimum preparation of a bachelor's degree, was adopted and became effective January 1, 1946. Under the schedule, teachers with no experience will start at a salary of $1,600, and will advance by annual increments up to a maximum of $2,100 after seven years' experience in the schools. It is expected that the schedule will aid materially in recruiting an adequate number of good teachers.

► A number of New Jersey communities are for the first time adopting salary schedules, in an attempt to hold their teachers, who have been leaving in large numbers to take other teaching jobs, or to enter private industry.

Early in January, the salary committee of the New Jersey Educational Association wrote to all New Jersey school districts asking them to report salary changes adopted during the past year, and the changes contemplated in 1946. The replies, according to Dr. Paul R. Spencer, showed that practically all districts had altered their policies to cope with the teacher scarcity and the rising cost of living.

Leonia, Ridgewood, Union City, Fairlawn, and Collingswood have met the situation through new salary schedules. Chatham, Roselle, and Union are offering increments and bonuses, and Pleasantville has raised its entire schedule $200. In Pitman, the cost-of-living bonus has been incorporated in the regular salary.

► Kansas City, Mo. The school board has approved a $200 basic increase for all teachers, raising the annual increment from $75 to $125, and setting up a new schedule of additional payments based on length of service and professional requirements. The increases will be dependent upon $600,000 additional revenue.

► Shelburne Falls, Mass. The school board has approved a new salary schedule, to become effective September 1, 1946. Under the plan, teachers will be classified according to years of experience and hours of training. Teachers with 60 hours' training will begin at $1,200 and will advance to $1,700 after five years' experience; teachers with 90 hours' training will begin at $1,300 and advance to $1,900 after six years; teachers with 120 hours' training will begin at $1,400, and advance to $2,000 after six years; and those with 150 hours' training will begin at $1,500 and advance to $2,200 after seven years. Men teachers will receive $200 more than women teachers, except specialized teachers.

Trained teachers, whose salaries are not at the maximum, will receive the regular increments, until their salaries reach the new maximums. No teacher will have his salary reduced.

Increments will be provided for each six points of additional training. The amount for the six points will be $75, provided the teacher remains at the school one year after the six points have been taken. A proportional amount will be allowed if a teacher requires less than six points.

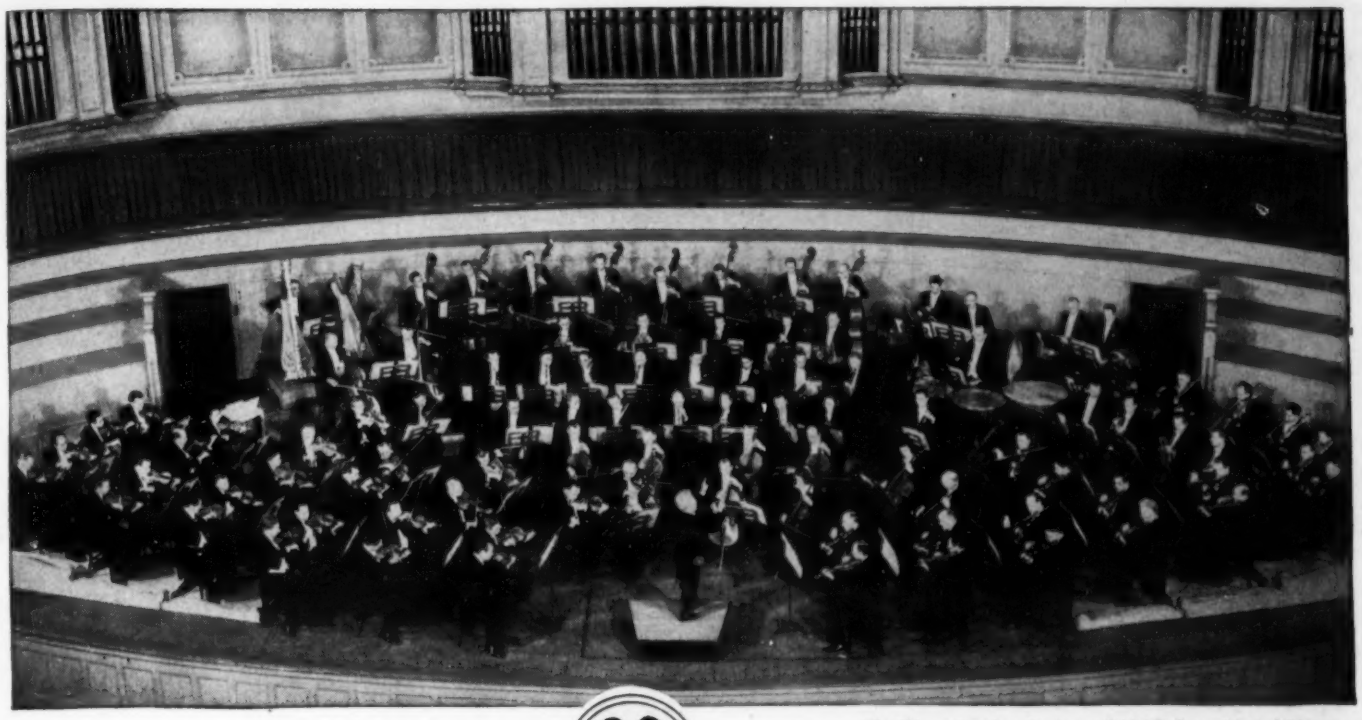
► Lynn, Mass. The school board has established new maximum salaries for the three high school principals, the deputy superintendent, and the supervisor of maintenance. The five officials were given increases this year of $200 each, bringing the salaries of high school principals to $4,700, that of the deputy superintendent to $5,200, and that of the maintenance supervisor to $3,800.

A new single-salary schedule, placing in effect the "equal pay" law for teachers, has been adopted, providing increases for all school employees, and reaching a total cost of $215,000.

► The board of education of Fitchburg, Mass., has adopted a new salary schedule for teachers, prepared by Supt. George C. Francis. The schedule which provides increases in basic salaries, retroactive to January 1, replaces the $2 a week temporary bonus formerly received by teachers.

Under the schedule, high school men and women teachers will receive a maximum salary of $2,950 this year. Those with a master's degree, or with 15 or more years' experience, will advance to $3,050 in January, 1947, and to $3,150 in January, 1948, provided they have earned a master's degree or have had 20 years' experience.

Elementary teachers without degrees, now receiving $2,001.50 per year, will be paid $2,150, provided they have had ten or more years' experience. Those with degrees will advance according to the schedule.



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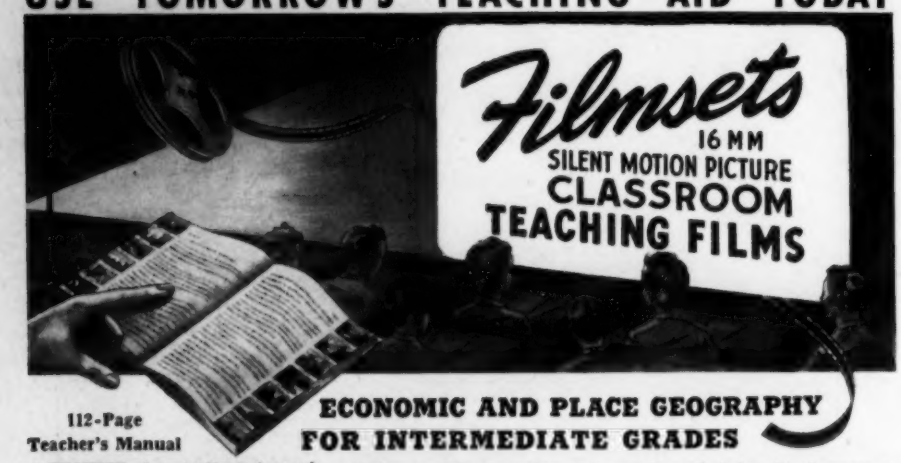

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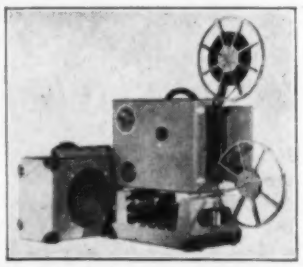

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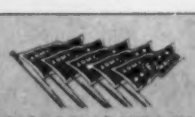

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Publications for School Business Executives

Annual Financial and Statistical Report of the Board of Education of New York City, 1944–45

Compiled by Charles Gilma, auditor. Cloth, 89 pp. Published by the board of education, New York, N. Y.

A report of the board of education for the fiscal year 1944–1945, (1) the financial statement of resources and disbursements for the current period, (2) statistical breakdown of disbursements, (3) fund and statistical accounting of budget allowances, (4) comparative financial exhibit, (5) per capita costs of instructional and extension activities, (6) school district statement showing boundaries and average daily attendance, (7) structural classification of school buildings, (8) average daily attendance in all day schools, (9) data from property schedules, (10) financial and physical details of each property, (11) location and areas of school buildings, (12) structural class of buildings, (13) number of stories and of instructional rooms, (14) classification of classrooms, (15) special features of buildings and rooms, (16) accumulated cost of plant, (17) cost of physical maintenance of plant, (18) cost of physical operation of plant.

Planning for Recreation Areas and Facilities in Small Towns and Cities

Prepared by J. Lee Brown for Office of Community War Services. Paper, 51 pp. Price, 20 cents. U. S. Government Printing Office, Washington, D. C.

A summary of steps in long-range community planning for recreation areas and facilities in small towns and cities. The procedure includes (1) organization of a planning committee; (2) a survey of the existing conditions; (3) evaluation of the existing facilities; (4) preparing a system of neighborhood facilities; (5) determining areas and facilities to be served; (6) relating the scheme to town planning; (7) preparing a priority schedule of land acquisition and development; (8) providing for adequate administration; and (9) providing an adequate budget. The plan of a war memorial recreation building is included.

A Report on Education

Compiled by Dean Thomas F. Cooper. Paper, 28 pp. Published by the Committee for Kentucky, Lexington, Ky.

A report on specific problems and short comings of Kentucky schools, prepared by a fact-finding committee, and dealing with problems of enrollment and attendance, teaching staffs, administration, educational status of adults, finance, vocational education, and library service. The presentation is in brief sentence form, illustrated with striking graphs, and embarrassingly frank questions.

Standards, Definitions, and Terms in Use by the Fan and Blower Industry

Paper, 11 pp. Bulletin No. 105, 1946. Published by the National Association of Fan Manufacturers, General Motors Building, Detroit 2, Mich.

The publication lists the terms used in the fan industry and the standards generally recognized and accepted by the industry. Classification, terms, definitions, and abbreviations are included.

City Finances, 1943

Prepared under the direction of E. R. Gray. Paper, 224 pp. Superintendent of Documents, Government Printing Office, Washington 25, D. C.

A statistical compendium concerning cities of over 25,000 population, listing cities by state. The booklet includes a summary of city finances including school costs, by city population groups and a summary of enterprise data by city population groups.

Office Planning and Layout

Paper, 26 pp. Prepared and issued by the Policyholders Service Bureau, Group Insurance Division, Metropolitan Life Insurance Company, New York, N. Y.

A bulletin on the selection and arrangement of office space, with layouts drawn to scale, and stating office requirements in terms of number of square feet per employee. These requirements are determined by: (1) nature of the available space, (2) character of the work, and (3) need for private offices.

The Disposition of School-Bond Issues and Special School Levies in Ohio, November, 1945

By W. R. Flesher. Paper, 23 pp. Ohio State University, Columbus 10, Ohio.

This report covers the results of school-bond issues and special levies submitted in Ohio school districts. The year 1945 was a peak year for cities and local districts in terms of the amount of school-bond issues submitted.

Financial Proposals Submitted in Ohio County School Districts, November, 1945

By W. R. Flesher, Paper, 15 pp. Bureau of Educational Research, Ohio State University, Columbus, Ohio.

The information, received from 112 cities, 86 villages, and 85 counties, shows the special school levies and school-bond issues to be submitted to the voters at the November 6 election by the local school districts of the state. The amount of the bond issues, by county school districts, was $11,699,120; by exempted villages, $1,295,000; by cities, $36,871,500; or a total of $49,865,620. The number of school levies, by counties, was 303; by exempted villages, 31; by cities, 35; or a total of 369.

Financial and Enrollment Data for Ohio City School Districts, Sepfember, 1945

By W. R. Flesher. Paper, 15 pp. Published by the Bureau of Educational Research, Ohio State University, Columbus, Ohio.

The report indicates what city districts submitted special school levies and school-bond issues at the November 6 election and gives the details for those proposals. Certain related financial and enrollment data for each of the cities are included.

While no school levies or bond issues were reported as having been voted on at the primary or special elections during the year, a total of 29 local districts submitted special levies, amounting to $36,871,500. The number of districts submitting special levies was 35.

School Fires

Paper, 48 pp. National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass.

A report on school fires, listing 1116 fires in school buildings between 1930 and 1945.

The most valuable section of the study outlines practical suggestions for fire-resistance construction, improvement in exits, and other means of preventing fires and safeguarding the lives of children and teachers.

Designing the Central School Plant as a Community Center

Paper, 10 pp. Prepared by Don L. Essex of the Division of School Buildings. Published by the University of the State of New York, Albany, N. Y.

Suggestions for planning the central school plant as a community center. Outlines five factors in planning a school plant and includes a layout plan.

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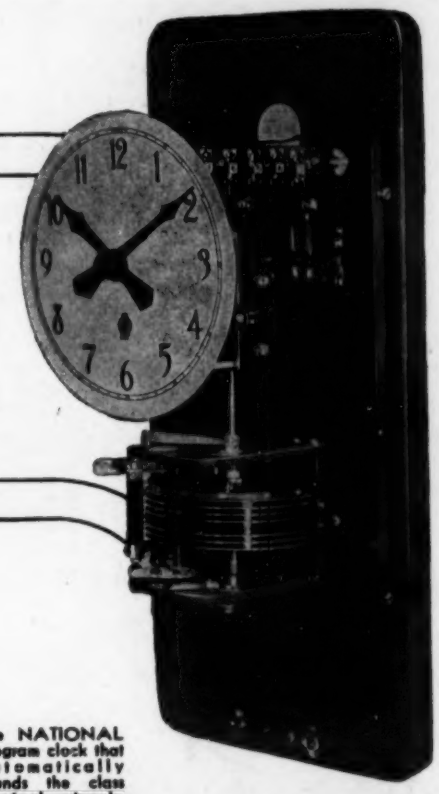

The NATIONAL program clock that automatically sounds the class dismissal signals, with cover removed to show general construction. This is a 2-circuit Type 42-12M, 2½ minute interval ringing period unit. Also supplied for 1-minute—3-minute and 5-minute interval ringing.

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School Administration in Action

THE USEFULNESS OF VISUAL AIDS

The public schools of El Paso, Tex., have been engaged for some time in a studied effort to determine the usefulness of visual aids in a public school program. Five full-time workers in this field have been placed on the staff of the department of instruction. Each of these workers possesses some expert knowledge of visual-education equipment and one is a technical expert, who has seen several years of service as a specialist in the marine corps.

In this program the first step was to organize classes for teachers. Instruction in these classes was concerned primarily with the operation and maintenance of visual-aid equipment. The classes which began in December, 1944, continued until the following June, and each teacher who expected to complete the course was required to attend nine sessions of two hours each. By the end of the school year, a sufficient number of teachers became acquainted with the operation and maintenance of equipment to overcome practically all difficulties formerly ascribed to mechanical details. The teachers received one hour of college credit upon completion of the course.

The supervisory staff and teacher committees are now engaged in selecting suitable films, film strips, slides, and other types of visual-aid material. The board will shortly furnish each school with sufficient equipment so that no school will need to depend upon a central agency entirely for films or machines. As a prelude to an intensive professional training campaign, preview centers were set up to afford opportunity to teachers to familiarize themselves with materials available.

The next series of classes, it is planned, will center attention on visual-education problems of a professional nature, which will comprehend the philosophical basis of visual aids, suitable uses of visual aids, selection of films, preparation for showing, and related questions.

Supt. A. H. Hughey reports that the program has aroused considerable enthusiasm and high hopes are held that the experiment will be enlightening and profitable.

LA MESA SCHOOL BUILDING PROGRAM

The board of education of LaMesa, Calif., has begun plans for a postwar school building program, to include three new building projects on sites already selected. Each of these buildings will be provided with combination cafeteria-assembly rooms. The building projects will be financed with a school-bond issue of $380,000 approved by the voters of the school district in November last.

HIGH SCHOOL GUIDANCE AT PARAGOULD, ARK.

During the school year 1944–45, the guidance program at Paragould, Ark., consisted of many different phases, both as a unified group and as separate units, under the personal supervision of the individual teachers and department heads.

During the year the vocational, the health, the commercial, the agriculture, the home economics, and the fine arts department were all given a high point value both in group and individual training. In addition, much work was done by each teacher, especially on individual personnel problems.

Other phases of the program were personal counseling on adolescent problems, a year-round employment service, and guidance on postwar problems. Advice and help were given both to present students and to former graduates and students in the armed forces, concerning postwar problems and planning. The eighth grade made a four-year plan for graduation.

WORKING CONDITIONS FOR JANITORS

The board of education of Superior, Wis., has entered into an agreement with the A.F.L. School Employees' Union for improved working conditions for janitors and engineers. The new contract, which became effective January 15, includes a $10 monthly increase, a 44-hour week to be worked out on a five-day basis, four weeks' annual vacation, and five day's sick leave. Working hours are to be staggered in order that men will be on duty evenings and Saturdays as needed.

Seniority rights have been included in the agreement so that the oldest men will be moved into the better positions. In case of a proposed dismissal, the employee will be given a hearing by the board of education. No janitor or engineer is to accept outside employment, unless specifically authorized to do so by the board. Any change of rules will go into effect only after thirty days' notice has been given.

► The public schools of Lead, S. Dak., are rapidly returning to their normal enrollment, after having suffered a serious loss of pupils during the war period. Upon order of the War Production Board the Homestake gold mine, the largest in the Western Hemisphere, was closed in order to concentrate mining activities upon metals essential for the war effort.

► Alvin, Tex. The school board has approved a 14-grade school system, with free tuition for all patrons of the school district. Plans have been started for a $500,000 school-bond issue to take care of the needs of the school and the proposed expansion program.

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Incentive to cleaner hands and neater washrooms

Liqua-San "C" in the non-clogging, leak-proof and fool-proof Sana-Lather Dispenser actually invites cleanliness. A single push on the Sana-Lather valve discharges just enough foam for a complete washing —without chapping or skin irritation. The thick, creamy Liqua-San lather cannot spatter on walls or floor or drip into the wash basin. Even when the hand is turned palm down the foam clings to it, Thus does Liqua-San "C" help keep washrooms clean.

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SCHOOL BUILDING CONSTRUCTION

Dodge reports that during the month of December, 1945, contracts were let in 37 eastern states for 98 educational buildings, with a valuation of $8,168,000.

During the month of December, 1945, contracts were let in 11 states west of the Rocky Mountains, for 24 school buildings, at a valuation of $2,697,850. During the same period, 35 projects were reported in preliminary stages, to cost $10,712,800.

SCHOOL BONDS

During the month of January, 1946, sales of permanent school bonds were recorded, in the amount of $18,071,500. The average interest rate was 1.51 per cent.

Refunding bonds were sold, in the amount of $184,000.

PERSONAL NEWS

► Supt. Albert S. Johnston, of Irving, Tex., has announced his resignation, to take effect July 1. Mr. Johnston is retiring after twenty years of service in the schools.

► Supt. W. Marvin Kemp, of Belle Fourche, S. Dak., has been re-elected for another term.

► Van Evrie Kilpatrick, formerly director of nature education and school gardening for the public schools of New York City, died February 9, at the age of 80, in Yonkers. Mr. Kilpatrick was responsible for the growth of the school garden movement and his enthusiasm led to the establishment of garden plots in hundreds of schools. As vice-president of the School Garden Association, he edited a nature garden guide for teachers and principals. He maintained his interest in gardening to the end and was in good health until a year ago.

► Acting Supt. Harry B. Marsh, of Springfield, Mass., has been re-elected for the present, until a successor can be obtained. Mr. Marsh will be eligible to retire because of having reached the retirement age.

► Gordon Renfrow, who has just returned from service in the navy, has been appointed director of the new division of veterans' education for the Missouri State Department of Education. He was director of supervision in the state department before he went into the navy.

► The school board at Columbus, Ga., has reorganized with R. M. Arnold as president, and W. C. Woodall as vice-president.

► Supt. John E. Wade, of New York City, will be eligible for retirement in August, 1947, and a committee of the board of education is already making a preliminary study of the problem of finding a successor. The office is considered one of the most important of the administrative school posts in the United States and pays $25,000 per year.

► Robert L. Haycock, superintendent of schools of Washington, D. C., retired from public school service on February 28, after a half century of teaching. Mr. Haycock, who is 70 years old, started his career in 1895. He taught at the Threlkeld School, and later at the Industrial Home School. After 14 years he left the classroom to become division superintendent. Later as assistant superintendent, from 1923 to 1943, he instituted special classes for crippled children, children with poor vision, and those who are hard of hearing. He opened classes in Braille in the District schools.

Mr. Haycock will be succeeded by Hobart M. Corning, formerly of Omaha, Neb.

► O. M. Schultz, Jr., has been elected principal of the high school at Fulton, Ky., to succeed W. L. Holland, who has taken the superintendency.

► Supt. Arville Wheeler and Asst. Supt. Roy Smith, of Ashland, Ky., have been given four-year contracts, with increases in salary. Mr. Wheeler's salary was raised to $5,000 per year, and Mr. Smith's to $3,600.

► W. N. Sellman, formerly director of elementary education at Desoto, Mo., has been elected assistant superintendent of schools, at St. Louis, Mo., to succeed the late John J. Maddox.

► Supt. F. A. Strand, of Madison, S. Dak., has been re-elected for a three-year term.

► E. V. Whelchel has assumed his duties as superintendent of schools at Moultrie, Ga. He succeeds J. L. Yaden, who has resigned after twenty years' service.

► L. B. Mann, superintendent of schools of Beech Grove, Ind., died in a hospital on February 1. He had been on leave of absence since June, 1945.

► C. J. Moseley, of Pleasant Ridge, Ky., has assumed his duties as superintendent of schools at Livermore. He succeeds W. C. Oakley.

► J. O. Lewis has accepted the superintendency at Mayfield, Ky., where he succeeds C. I. Henry.

► Dr. Joseph H. Saunders, who had served for 21 years as superintendent of schools in Newport News, Va., died at his home on February 9, after a long illness. Dr. Saunders, who held a bachelor of arts degree from William and Mary College, and a master of arts degree from Chicago University, had recently resigned from the state board of education on which he had served since 1930. Before going to Newport as superintendent, he had served as principal of the John Marshall School, Norfolk, of the Bland High School, Churchland, and of the city Normal schools in Richmond.

► Supt. Elmer Lindahl, of Neligh, Neb., has been elected president of the Nebraska County Superintendents' Association.

► Supt. F. R. Powers, of Amherst, Ohio, has been re-elected for a two-year term.

► W. C. McMillan has been elected superintendent of schools at Fort Calhoun, Neb., to succeed Keith Lemon.

► Fred Hendrickson has been elected superintendent of schools at Ligonier, Ind., to succeed O. R. Bangs. He was formerly principal of the high school.

► Ernest R. Britton, of Effingham, Ill., has accepted the superintendency at Midland, Mich., and will enter upon his duties on July 1.

► The board of education at Oklahoma City, Okla., has reorganized with Roy T. Turner as president; N. L. George as clerk-business manager; and Mrs. Flora Penney as secretary.

► Walter Bigelow has been re-elected to his third term as president of the board of education of La Crosse, Wis. Otto Zielke was named vice-president.

► The school board at Lancaster, Ohio, has reorganized with Clarence M. Ochs as president; Edgar L. Campbell as vice-president; and T. L. Hewetson as clerk.

► The school board at Barnesville, Ohio, has elected Foster Gasper as president; Lewis Watt was elected vice-president; and Ross Fowler, clerk.

► Dr. S. C. Mason, a member of the school board of Menominee, Mich., since 1933, died at his home on January 10. Dr. Mason began his fifth term on the board in July, 1945, and had recently been named as treasurer.

► The school board of Ashville, Ohio, has reorganized with Donald P. Courtright as president, and Roy Hedges as vice-president.

The Ashville-Harrison Joint High School Board has elected J. L. Baum as president, and Donald Courtright as vice-president.

The lifting-lid book box can be easily adjusted to provide level writing surface—smooth, flat and firm.

Ease of getting in and out is assured by a seat that swivels 45° to either side.

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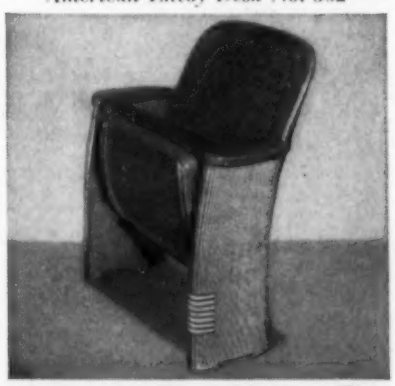

American Bodiform Auditorium Chair No. 12-001

In the American Universal Lifting-Lid Desk, illustrated above, American Seating Company's engineers have combined new, improved features of design in a way that contributes to better posture, greater hygienic comfort and effective sight conservation.

Erect sitting is relaxed and comfortable, by reason of the self-adjusting lower back rail, and seat scoop with no rearward elevation. The smooth-acting, silent swivel permits a 45° turn either way to a cushioned stop. The heavy tubular steel frame has a fluted footrest base that minimizes wear of the finish. The roomy book box is sanitary in form and finish, and has no exposed wood screws or moving parts.

Available at moderate prices are American Envoy Chairs, Desks and Tablet-Arm Chairs, American Steel Folding Chairs, Portable Assembly Chairs, Universal Tables, and Bodiform Auditorium Chairs. Write for information.

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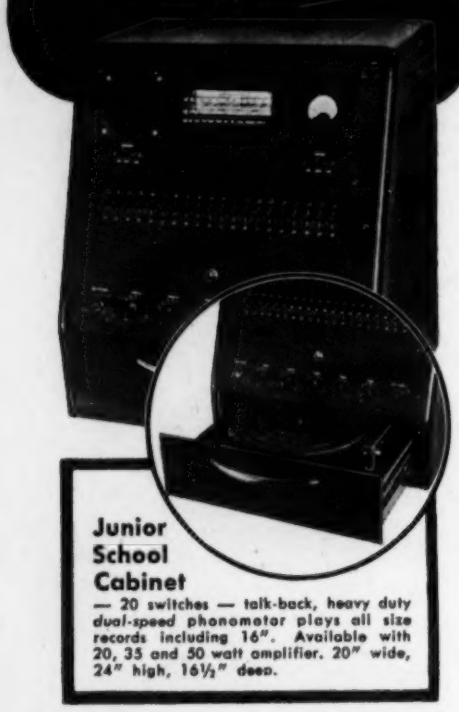

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The ideal unit for schools with a modest budget, the precision-built Junior Model System is enclosed in all-steel grained walnut finished cabinet. Set includes: all-wave, super-heterodyne radio, automatic volume control, office or remote microphone, monitor speaker, simplified controls, silent acting classroom switches, high fidelity amplifier, sliding front panel for easy servicing, can be mounted on table, desk or wall.

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Personal News

PERSONAL NEWS OF SUPERINTENDENTS

► Dr. O. H. Bimson, formerly assistant superintendent of schools at Lincoln, Neb., has resigned in order to accept a position with the United States Office of Education. His new government post, which will permit him to live in Lincoln, is largely concerned with the distribution of surplus property to the schools. His work has brought him national recognition at least twice. In the past six years he has been given leave of absence twice to participate in national studies. He headed a working staff in the department of education concerned with consumer information.

► J. O. Lewis, of Fulton, Ky., has been elected superintendent of schools at Mayfield, to succeed C. I. Henry.

► Dr. James H. Risley, superintendent of schools at Pueblo, Colo., will retire at the close of the school year in June, after the completion of 25 years of service. In April, 1944, he was re-elected for an additional four-year term, with the provision that he be allowed to retire at the close of the school term following the end of the war.

Dr. Risley started teaching at the age of 17. After becoming superintendent at Pueblo, he was again called upon to teach during the summer vacation period. He spent eight summers teaching at Greeley; five summers were spent at the University of Colorado in Boulder; five at the State College of Agriculture; and one summer at the Western State College in Gunnison.

As chairman of the Colorado Education Association legislative committee and the interim committee on education, Dr. Risley worked for many years to obtain state help to equalize educational opportunity for the children of the state.

Dr. Risley served as director in the National Education Association, as a member of the advisory board of the American Association of School Administrators, as president of the Kentucky Education Association in 1920, and as president of the Colorado Association in 1930–31.

► Supt. Lowell P. Goodrich, of Milwaukee, Wis., has been re-elected to serve a second three-year term as head of the city schools. Elected in July, 1943, to succeed Milton C. Potter, he will begin his new term in July, 1946.

► Jessie M. Parker, State Superintendent of Public Instruction of Iowa, has announced her candidacy for re-election to that position.

► Harvey W. Newman has returned to his position as superintendent of schools at Webster, S. Dak., following his release from army service.

► Supt. C. C. Turner, of Stratton, Neb., has been re-elected for a three-year term.

► Supt. Harlan D. Beem, of Coles County, Ill., has been elected president of the Illinois County Superintendents' Association.

► John Wilson Gregory has been elected superintendent of schools at Lancaster, Ky., to succeed C. H. Purdom. He was formerly assistant superintendent of schools.

PASSING OF DR. WILLIAM G. COBURN

Dr. William G. Coburn, who for 40 years was superintendent of schools at Battle Creek, Mich., passed away in the Sanitarium Hospital on January 22, after a long period of invalidism. He had suffered from the effects of a severe fall in August, 1945, and his condition was aggravated by heart attacks.

Dr. Coburn began his career as a teacher in a country school near Kalamazoo. After earning a coveted A.B. degree at the University of Michigan, he became principal of the high school at Berndale, Minn., where he taught various classes, as well as supervised the whole educational program. Later, he took a similar position at Vicksburg, and three years later became superintendent at Allegan, Mich. It was in 1895 that he moved from Allegan to Battle Creek, to succeed Fred W. Arbury.

Dr. W. G. Coburn

The 40 years from 1895 to 1935 that Dr. Coburn served as superintendent in Battle Creek were momentous years, and under his guidance the schools attained prominence throughout the country. The story of Dr. Coburn's active years as an educator is practically the story of public school education in the nation for that period.

Dr. Coburn worked out the plans for the first manual training department. The board of education, at the suggestion of Dr. Coburn, in 1902 acquired a piece of property which had been a knitting mill and there the manual training experiment was created. The purchase price was $5,000 and the property included a large section of land which later became the school athletic field.

Other innovations followed, including an ungraded schools for boys who did not fit into the regular classes, open-air schools for boys and girls, and free milk for undernourished children. Later came school nurses, dental service, special classes for crippled children, domestic science laboratories, and the placing of high school athletics on a practical basis.

Dr Coburn was a national figure in education during World War I, when he was chosen by the War Department to organize and take charge of government schools on the industrial reservations east of the Mississippi River. He established schools at Muscle Shoals, Nitro, W. Va., Prairieville, Md., Nashville, Tenn., and other places.

A testimonial dinner for Dr. Coburn, sponsored by the Chamber of Commerce, was tendered him on June 11, 1935, with President Ezra Clark presiding. He was presented with two testimonial volumes at that time, one containing the speeches and tributes at the dinner program and numerous letters written by civic and educational leaders, and a second containing tributes prepared by the principals, supervisors, administrative office employees, and others.

Dr. Edgar Fuller
State Commissioner of Education of New Hampshire

Dr. Edgar Fuller, who has recently been appointed state commissioner of education for New Hampshire, was formerly acting chief of the aviation education division of the Civil Aeronautics Administration. He will have his headquarters at Concord.

Dr. Fuller became a member of the staff of the CAA early in 1942, when he assumed the work of promoting aeronautics instruction in the elementary, high schools, and colleges of the country. He has had a full background of education training and experience. He received his doctorates in law and education at Chicago and Harvard Universities. He was superintendent of schools in Virden, N. Mex., and taught educational administration at Harvard University. His background of educational knowledge and procedure were of great value in the operation of the CAA preflight program in the schools of the country. He became a private pilot in 1945.

NEWS OF SCHOOL OFFICIALS

► William A. Blessed, president of the board of education of Port Huron, Mich., for the past four years, died at his home on January 4, after a long illness. Elected to the board in June, 1939, he was made president of that body in July, 1942. As a member of the board, his energies were constantly directed to the improvement of the school facilities for the youth of the community.

► N. L. George has returned to his position of clerk of the school board at Oklahoma City, Okla. He recently received his doctorate from Columbia University.

► Edward E. Watson has been appointed acting secretary of the board of education at University City, Mo., to succeed Fred W. Offerjost.

► The school board of New Bedford, Mass., has elected Thomas C. Moriarty as vice-president for the next year. W. Edward Metcalf and James H. Tighe are the new members.

MESSAGES
TO AMERICAN
SCHOOL TEACHERS
No. 14

We Can't Back Into The Future

By Elizabeth Ireland, *Superintendent of Public Instruction*, State of Montana

Our nation no longer is the greatest provincial civilization in the world. Our ships sail the seven seas and all the skyways. We have become the greatest traders and travelers on earth.

If the United States is to maintain a world-wide influence, prominence, power and respect, the level of general education must be raised. No longer can we back into the future while looking at the past. The future must be faced head-on.

In these days, eternal vigilance should be exercised to instill in youth a high regard for democratic institutions and procedures, and the basic principles of the American way of life.

The youth of our land should be given abundant opportunity to inform themselves on current social, economic and scientific matters, and I know of no better or more pleasant way of securing such information than through the Reader's Digest, which contains present-day articles of lasting interest.

The Digest is widely used in the schools of Montana, and it supplies a definite need, for however valuable textbooks may be, they must be supplemented by just such varied and interesting briefs of current affairs and happenings as it offers from month to month.

I recommend it highly as a guide to the formation of right ideals in the minds of American youth, and to the evaluation of those principles which are basic in the government of a free people.

The Reader's Digest

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BOOKS BOUND IN BINDERS BOARD ARE BOUND TO LAST

NEW BOOKS

Reading Readiness in the St. Louis Public Schools

A special study by William Kottmeyer. St. Louis Public School Journal, St. Louis, Mo.

A disturbing study of the problem of starting children in their school experience. The summary of tests indicates that a considerable percentage of children have physical and mental handicaps which hitherto haven't been recognized and adjusted for.

Essentials of American Business Law

By R. Robert Rosenberg, Cloth, 374 pp. Price, $1.40. The Gregg Publishing Co., New York 16, N. Y.

This one-semester course for high school classes is fully representative of present-day questions in law; it includes very complete problems for study and illustrative examples from actual cases. In the hands of a competent teacher who will point out the occasional differences between the moral law and the civil law the book should prove to be eminently successful.

You Can Read Better

By Ellen Wales Walpole. Cloth, 288 pp., illus. $1.32. Silver Burdett Co., New York 3, N. Y.

This is not a reader, but a study on the junior high school level, of the principles of accurate and fluent silent and oral reading with exercises to test comprehension and many lessons in the phonetic phase of the English language.

Safety Handbook for School Shops

Compiled by Harvey Wheaton, Daniel Connor, and Edgar Royce. Paper, 20 pp. Published by the New Hampshire State Board of Education at Concord.

A useful safety handbook, intended to teach safety as a part of the shop course. It contains information on general safety conditions in the physical plant, safety practices in shops, suggestions for specific shops, and machines, and tools, and provides for uniform reporting of accidents.

The Principal in the Modern Elementary School

By Robert Hill Lane. Cloth, 313 pp. Houghton Mifflin Co., Boston.

Busy school principals frequently characterize educational books as being too theoretical, and too far removed from the practical job of administering a school. Lane's[1] third and last volume on the modern elementary school can scarcely be so criticized. The approach is primarily functional. Definite information and suggestions on most of a principal's responsibilities may be found in this small volume. The topics discussed include the management of people; the management of things; the planning of buildings; the study of child growth; curriculum planning; the appraisal of instruction; and the improvement of the principal as a citizen.

The author's underlying educational philosophy is "that the major aim of the school is to secure the continuous growth of children through the provision of desirable experiences in a controlled environment" (p. 147). The ultimate end of "growth" is not entirely clear, but is suggested in a pattern for civilized adults, outlined for principals (pp. 287–288). The author shows reactionary tendencies at times. For example, he questions complete substitution of integrated activities for subjects as such; and he recommends some measures which can be called discipline (p. 174).

City elementary school principals can get from this book a deepened concept of their responsibilities, many helpful suggestions, and stimulation for comprehensive educational leadership. For research findings and a broad picture of elementary school administration in the United States they will have to look elsewhere. The richness of administrative experience, the depth of human insight, and the professional zeal which the author reflects compensate somewhat for the lack of scientific and philosophical precision. Most principals can refer to this book with profit when planning means of performing their various functions.

The selected references listed are an excellent beginning for further study. — *John P. Treacy.*

[1]Other books in the author's series: *The Progressive Elementary School,* 1938; and *The Teacher in the Modern Elementary School,* 1941.

Type With One Hand

By Nina K. Richardson. Paper, 28 pp. South-Western Publishing Co., Cincinnati, Ohio.

For many years students in schools have not been taught to type with either the right or the left hand. This procedure was necessary because of a total lack of organized teaching materials, established procedure, or even a reliable source of information.

This course has been designed to meet an immediate need for outlined materials and established procedures. The content has been arranged for ease in making the reaches, simplicity of teaching, and effectiveness in results. One-handed typing serves an immediate need because of the number of amputees and paralytics who are interested in typing skill for personal or professional use.

Stories From the South

Compiled by Marion Belden Cook. Cloth, 287 pp. Silver, Burdett & Company, New York 3, N. Y.

This latest addition to the Silver "Children of the U. S. A." series, includes word pictures of the happy lives, the work, and the customs of children — and their elders — in the southern states and the islands of the Carribean. These informational stories are especially interesting to social science classes in the middle and upper grades.

Teaching With Films

By George H. Fern & Eldon B. Robbins. Cloth, 160 pp., illus., $1.75. The Bruce Publishing Co., Milwaukee 1, Wis.

Teachers and school administrators will welcome this simple presentation of what they want to know about films (slide films, silent films, sound films, and even homemade glass slides), and the operation of projectors (kinds of film, repairs to film, setting up and adjusting the apparatus, seating the audience, etc.).

No claim is made that the film can ever supplant the teacher or become a substitute for study and practice by the learner; the use of the film is urged for its proved value as an aid to teaching and learning. There is no attempt at an exhaustive treatment of any one phase of teaching with films, but this small textbook supplies a vast amount of educational and practical information on a timely subject for the busy, wide-awake teacher and principal. Special application of film problems is made to industrial arts and vocational education, but the principles and technique are just the same for use in teaching academic subjects.

Annual Report of the U. S. Office of Education

By Hon. John W. Studebaker. Paper, 76 pp., 15 cents. Superintendent of Documents, Government Printing Office, Washington 25, D. C.

This report which is section II of the Federal Security Agency, sets forth a plan of organization to improve the services of the Office of American Education. The plan calls for an expansion of staff and an improvement of organization within the Office of Education to accomplish more efficiently the purpose for which the Office was established. During the postwar period, the Office will endeavor to more efficiently serve the schools, school systems, and colleges of the country and otherwise promote the cause of education throughout the country.

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School Board News

► The board of school directors of Milwaukee, Wis., has adopted resolutions governing the placement of certificated employees, welfare workers, and workers in recreation and adult education other than classified employees. The rules which became effective January 1, 1946, call for the placement of employees in the new classifications into the new schedule, at an equal or off-step to the nearest advanced step without change of existing increment dates where an increment date has occurred during the past year. Where no increment date has occurred during the past year, placement will be at the nearest advanced step of the new schedule, establishing January 1 as a new increment date. The salaries paid are equivalent to those of regular teachers, principals, and vice-principals of the same training and experience.

► Ware Shoals, S. C. The board of trustees has voted to join the state retirement system, so that all teachers may become eligible for a pension at retirement, for supplementary salary, as well as state aid salary.

► Fond du Lac, Wis. The school board has voted to increase the salary of the director of recreation $10 per week, and to employ him on a full-time basis for a period of not to exceed ten weeks.

► Clinton, Iowa. A school of instruction for members of boards of education in Clinton County has been established. Presidents and secretaries have been urged to attend but all board members are invited. Among the topics taken up were Iowa school laws, standards for rural schools, and making the annual tax levy.

► Quincy, Mass. The school board has voted to employ a consultant, at a cost of $50 a day, to assist in making long-range plans for an expansion of the school system.

► Oklahoma City, Okla. The school board has established a policy that extensions of military leaves will be granted up to and including one year. Salary and seniority promotions, granted annually to personnel on military leave, will not be extended for professional study.

► Williamsburg, Mass. Supt. L. A. Merritt, in his annual report to the school board, has proposed an expansion of the high school program of studies to include electricity and other trades subjects which may be studied at schools in adjacent communities.

► North Adams, Mass. The school board has voted to make all meetings of the board executive sessions. Under the rule, newspaper representatives will be excluded from meetings of the board.

► St. Louis, Mo. Most of the city's 137 schools were closed beginning February 4, due to a strike of 392 custodians and matrons in a wage dispute with the board of education. Fully 70,000 students were unable to attend classes because of a lack of heat in the buildings. All adult-education classes were compelled to disband and 10,000 students were without classroom space.

► Framingham, Mass. The school board has decided to retain a sufficient number of per diem teachers so that every war veteran now on military leave who returns to the city will receive his position. The plan carries out the original established policy of the board with respect to employment for those on military leave.

► Glenview, Ill. The school board has received a report on the recent survey of the schools, conducted by Dr. Eugene Lawler, of Northwestern University. The report contained recommendations for the improvement of the schools, including centralization, purchase of sites, financing of needed improvements, and planning of buildings to care for pupils already enrolled and for the prospective increase through new building for two years.

► Henderson, Ky. The school board has approved a proposal of the Henderson County Board of Health, calling for annual X-ray chest examinations for teachers, bus drivers, and other school employees. The examinations may be made by a doctor chosen by the individual teacher or may be conducted at the health center.

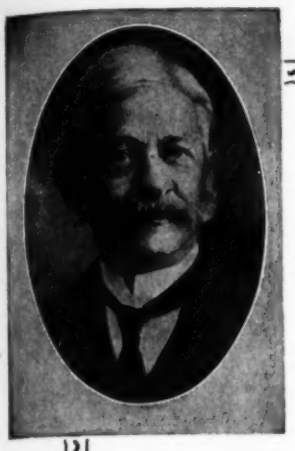
► Stevens Point, Wis. The school board has co-operated with the city in the operation of a city recreational program, under the direction of James Masik. The recreational activities will supplement the school instruction and will take care of all out-of-school people, including veterans and adults in an all-round program.

► Flint, Mich. The public schools have reopened after a week's vacation enforced by a walkout of CIO maintenance workers. The strike forced a shutdown of 44 schools and closed the classrooms to 27,000 children. The board and the workers agreed to a one-week truce to consider a proposal that the board grant a 10-cent hourly increase; the workers in turn would put aside additional demands, including a closed union shop contract.

► Savannah, Ga. The Chatham County board of education has received a grant of $50,000 from the Donner Foundation, Inc., for an accelerated program in the high school. The program will permit a group of students to complete the final grade of the junior high school and the three years of work of the senior high school in three instead of four years.

Included in the grant is a sum of $20,000 to provide quarters for the classes by the erection of a three-room addition to the high school building. The remainder of the fund will be paid in annual installments of $6,000 each year for five years, to provide three additional instructors necessary to carry on the program.

► Ware Shoals, S. C. The public school building, housing 1050 high and grammar school children, has been equipped with fire prevention sprinkler system and fluorescent lights.



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After the Meeting

THEN AND NOW

Recently we were looking at a verse written long ago about the little red schoolhouse. Part of it goes like this:

That men should teach the winter school
Became the universal rule;
Much brawn the teacher must possess,
Though he might have of knowledge less,
The switch was large and toughened through
And freely plied whenever due.
One thing promoted discipline,
And held the roguish nature in,
It was the never failing rule:
Two strokes at home, for one at school.

However, that isn't the way it is now:

But now if you should hit dear Willie,
His Pa or Ma would knock you silly.
In fact, you shouldn't speak up gruffly,
For fear of being treated roughly.
The use of switch despite youth's pleadings
Will only lead to court proceedings,
So in your daily task be gentle,
Let all your "socks" be merely mental.

— Conn. School Administrator

G.I. Joe Considers Education

"Am I going back to school?" said a discharged soldier, repeating my question. "Are you kiddin'?"

"With St. Patrick's church advertising for a janitor at $1,500 a year? With men digging sewer ditches at $1 an hour? With bartenders getting $50 a week?

"With the fellow who sweeps out getting more money than the teachers? With the man who empties the wastebaskets better paid than the desk man? With restaurants and beauty parlors grossing $12,000 and $15,000 a year?

"With plumbers and plumbers' helpers and carpenters and bricklayers and garage mechanics and welders making more money than lawyers and physicians and dentists and teachers and those in the so-called learned professions?

"The answer is, 'Heck, no!' It's time somebody quit school and went to work!"

Maybe the boy will be sorry when he's 50. But you must admit he has an argument. — *Monroe County Democrat, Sparta, Wis.*

Heard at A.A.S.A. Convention

"Do you think the superintendent put enough fire in his speech?"

"My opinion is that he didn't put enough of his speech in the fire."

A Help

Among the surplus materials the government is offering for sale are listed 26,827,157 tins of salted nuts. Just about enough to sustain our high school population through one double feature. — Chilton, Wis., *Times-Journal.*

Silly Answer Department

"Johnny," asked the teacher, "why does Missouri stand at the head in mule-raising in the United States?"

"Because the other end is too dangerous, I guess." — *Wall St. Journal.*

Makes Sense

Bobby: "Aren't you driving kinda fast, Daddy?"

Father: "You don't want to be late to school, do you?"

Bobby (thoughtfully): "No, but I'd much rather be late than absent." — *The Quill.*

That's a Question

Memory training by association became a fad in a certain school. "For instance," the English teacher was explaining, "if you want to remember the name of a poet, Bobbie Burns, you might conjure up in your eye a picture of a London policeman in flames. You see, 'Bobbie Burns.'"

"I see," said one of the pupils, "but how is one to be sure that it doesn't represent 'Robert Browning'?"

CONVENTION CALENDAR

March 13–16. California Association of Public School Business Officials at San Diego, Calif. T. L. McCuen, Kern Co. High School, Bakersfield, Calif., secretary. Headquarters, U. S. Grant Hotel.

March 27–30. Annual meeting of Schoolmen's Week, at the University of Pennsylvania, Philadelphia.

April 5–6. Western Ohio Superintendents & Principals Round Table at Dayton, Ohio. A. E. Gower, Chillicothe, Ohio, secretary. Headquarters, Y.M.C.A.

April 9–13. American Association for Health & Physical Education & Recreation at St. Louis, Mo. Dr. Ben W. Miller, 1201 — 16th St., N.W., Washington, D. C., secretary. Headquarters, Hotel Jefferson.

April 8–10. Association for Childhood Education at Cincinnati, Ohio. Miss Mary E. Leeper, 1201 — 16th St., N.W., Washington, D. C., executive secretary. Headquarters, Gibson Hotel.

April 11–13. Michigan Industrial Education Association at Grand Rapids, Mich. Arthur L. Reagh, 143 Bostwick Ave., N.E., Grand Rapids, Mich., executive secretary. Headquarters, Pantlind Hotel.

April 17. Missouri Association of School Boards at Jefferson City, Mo. Mrs. E. M. Flippen, State Dept. of Education, Jefferson City, Mo.

April 20. Massachusetts Teachers Federation at Boston, Mass. Hugh Nixon, 14 Beacon Street, Boston, Mass., secretary. Headquarters, Statler Hotel.

April 22–25. American Association of Collegiate Registrars at Atlanta, Ga. R. F. Thomason, University of Tennessee, Knoxville, Tenn., secretary.

April 26–27. Wisconsin Association of School Administrators at Milwaukee, Wis. W. F. Waterpool, Marinette, Wis., secretary. Headquarters, Hotel Pfister.

May 2–4. Wisconsin Congress of Parents and Teachers at Sheboygan, Wis. Mrs. Otto L. Falk, 2406 No. 117th St., Wauwatosa 13, Wis., secretary.

May 3–4. Pennsylvania Industrial Arts State Conference at Millersville, Pa. Burl N. Osburn, State Teachers College, Millersville, Pa., director in charge. Headquarters, State Teachers College.

May 20–22. National Congress of Parents and Teachers at Denver, Colo. Mrs. W. A. Hastings, 600 South Michigan Ave., Chicago 5, Ill., president.

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Rocky Mountain Teachers Agency, Denver
Western Teachers Exchange, Denver

CONNECTICUT
Cary Teachers Agency, Hartford 3

ILLINOIS
Albert Teachers Agency, Chicago 4
Clark-Brewer Teachers Agency, Chicago 4
Fisk Teachers Agency & Am. Col. Bureau, Chicago 4
Hughes Teachers Agency, Chicago 4
Illiana Teachers Agency, Champaign
Teachers Registry & Exchange, Chicago 1

IOWA
Central Teachers Agency, Cedar Rapids
Clinton Teachers Agency, Clinton
Edwards Teachers Agency, Sioux City ..13
McGoons Teachers Agency, Hampton
Midland Schools Teachers Agency, Des Moines
Sabins' Educational Exchange, Des Moines

MARYLAND
Baltimore Teachers Agency, Baltimore

MASSACHUSETTS
Grace M. Abbott Teachers Agency, Boston
The Cary Teachers Agency of Boston, Boston
Fisk Teachers Agency, Boston

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Clark-Brewer Teachers Agency, Minneapolis 1
Educational Service Bureau, Minneapolis
Minnesota Teachers Service, Minneapolis
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MISSOURI
Clark-Brewer Teachers Agency, Kansas City
Specialists Educational Bureau, St. Louis 3
Wood Teachers Agency, Kansas City

MONTANA
E. L. Huff Teachers Agency, Missoula

NEBRASKA
Davis School Service, Lincoln

NEW YORK
Allied Teachers Agency, New York
American & Foreign Teachers Agency, New York
The Associated Teachers Agency New York 18
Bardeen-Union Teachers Agency Syracuse 2
Clark-Brewer Teachers Agency, New York 10
Co-Operative Teachers Agency, Buffalo
Educational Placements, New York 18
Interstate Teachers Agency, Rochester 4
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Washington News

WAR SURPLUS

Under an executive order, issued by President Truman on February 1, the Surplus Property Administration and other agencies engaged in handling the surplus war assets have been merged into a War Assets Corporation, a subsidiary of the Reconstruction Finance Corporation. The work will be directed by Lt. Gen. E. B. Gregory, formerly quartermaster general, and will take effect March 25.

DRAWING INSTRUMENTS AND BOOKS

The War Assets Corporation has in its regional offices a supply of drawing boards, tracing cloth, tracing paper, scales, and dividers which are available for school use.

The War Department has available a million textbooks, purchased for army schools overseas. The books are on the college level but have only been declared surplus in part, and have not yet been placed on sale.

SURPLUS PROPERTY FOR EDUCATIONAL INSTITUTIONS

As of January 24, the United States Office of Education issued a list of 27 field representatives to handle requests for surplus war property utilization. At the same time, the Office reported that state school officers, or other representatives of state governments, in 38 states were available for receiving requests from local school boards.

In the following states the office of the state superintendent of public instruction, or state commissioner of education in the state capital is handling requests: Alabama, Arkansas, Connecticut, Delaware, Idaho, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Missouri, Montana, New Hampshire, New Mexico, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, Wisconsin.

In the following states other branches of the state government handle requests:

Colorado, Denver — H. Rodney Anderson, state purchasing agent, State Capitol

Georgia, Altanta — J. W. Sikes, director, Division of surplus property, State Office Building

Indiana, Indianapolis — H. G. McComb, executive officer, Indiana Educational Agency for Surplus Property, State House

Kansas, Topeka — C. V. Kincaid, state business manager, State House

Mississippi, Jackson — W. D. Hilton, director of Office of Surplus Property

North Carolina, Raleigh — W. Z. Betts, director of Division of Purchase and Contract

Oklahoma, Oklahoma City — Joe R. Holmes, surplus property agent, State Capitol

South Dakota, Pierre — A. B. Blake, secretary of finance

Texas, Austin — Weaver H. Baker, chairman, Texas Agency for Surplus Property, State Board of Control

West Virginia, Charleston — Carl Riggs, executive officer, West Virginia Educational Agency for Surplus Property, State Capitol Building

Local school authorities may learn more concerning the policies of the Federal Security Agency concerning surplus property by addressing H. F. Alves, director of the Division of Surplus Property Utilization, U. S. Office of Education, Washington, D. C.

SCHOOL-BUILDING CONSTRUCTION

Major General Fleming, Federal Works Administrator, in a number of public statements made recently, estimates that the public construction in 1946 will require $1,900,000. The terrific rise in cost will seriously hamper the construction of public school buildings, because boards of education will not be able to adjust their budgets or their bond issues to the new high levels which the present confused situation is causing.

CITIZENS' COMMITTEE ANNOUNCED

A committee to act as an advisory group to the United States Office of Education and to help reflect the thinking of laymen on educational problems of national significance has been announced.

The committee, to be known as the Citizens' Federal Committee on Education, is to represent nine areas of national life: agriculture, business, homemaking, labor, manufacturing, the Negro, the professions, religious groups, and veteran groups.

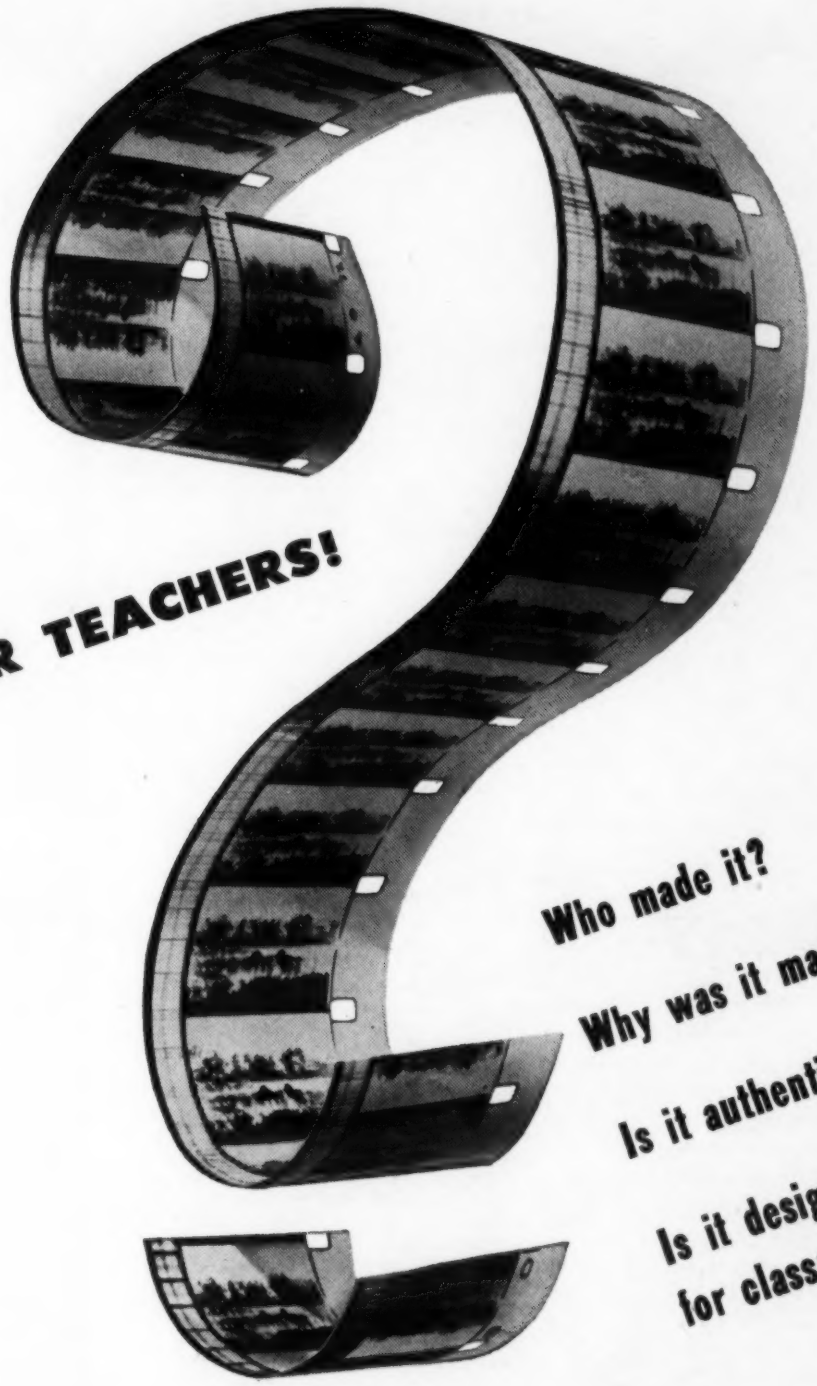
The first meeting of the committee is to take place during the month of March.

PRESIDENT URGES FEDERAL AID

In his annual message to Congress, on January 21, President Truman urged such federal financial aid to the states as may be necessary to more readily assure equal opportunities for a good education. In discussing aid to needed school building construction, he wrote:

"As a part of our total public works program, consideration should be given to the need for providing adequate buildings for schools and other educational institutions. In view of current arrears in the construction of educational facilities, I believe that legislation to authorize grants for educational facilities, to be matched by similar expenditures by state and local authorities, should receive the favorable consideration of the Congress.

"The Federal Government has not sought, and will not seek, to dominate education in the states. It should continue its historic role of leadership and advice and, for the purpose of equalizing educational opportunity, it should extend further financial support to the cause of education in areas where this is desirable."



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Washington News

FOREIGN STUDY THROUGH SURPLUSES

A bill has been introduced in the U. S. Senate, by Senator Fulbright of Arkansas, permitting the Department of State to obtain title to wartime surpluses now located in foreign countries. These surpluses cannot be sold for cash and it is not likely that the United States will receive goods in exchange. It is proposed that the State Department receive credit for these surplus goods and use the credit to send United States students to foreign countries for study, and to finance foreign students coming to this country. In former years the United States used its share of indemnity from the Boxer Rebellion in China to finance study by Chinese students in this country.

OFFICE OF EDUCATION REORGANIZED

Dr. John W. Studebaker, U. S. Commissioner of Education, has announced the reorganization of the Office of Education to bring it into line with the new demands being made upon it. Eight general divisions have been established, including one whose task it is to follow developments in international education, especially the proceedings of the United Nations Educational Organization.

Dr. Harold R. Benjamin, who is in charge of this division, was formerly dean of the College of Education, University of Maryland, and is conversant with eight languages.

Other new appointees are: Kenneth O. Warner, director, Division of Special Services; Galen Jones, director, Division of Secondary Education, and Richard H. Logsdon, chief librarian, Office of Education Library.

Other officials with the office prior to the reorganization have received new assignments: Dr. Bess Goodykoontz, Director of the Division of Elementary Education; Dr. J. B. Wright, director, Division of Vocational Education; Fred J. Kelly, director, Division of Higher Education; and Rall I. Grigsby, director, Division of Auxiliary Services and acting director of the Division of School Administration.

A temporary division has been established, to be in charge of surplus property utilization. This is headed by Henry F. Alves as director.

Other assignments recently made include Maris M. Proffitt, acting assistant director, division of secondary education; Ralph C. M. Flynt, assistant director, division of central services; Franklin Dunham, to supervise educational uses of radio; Carl A. Jessen, to supervise secondary school organization and supervision within the division of secondary education; Francis G. Cornell, chief of research and statistical service, division of central services, and Ray L. Hamon, chief of school housing section, division of school administration.

A SAVINGS PROGRAM FOR SCHOOLS

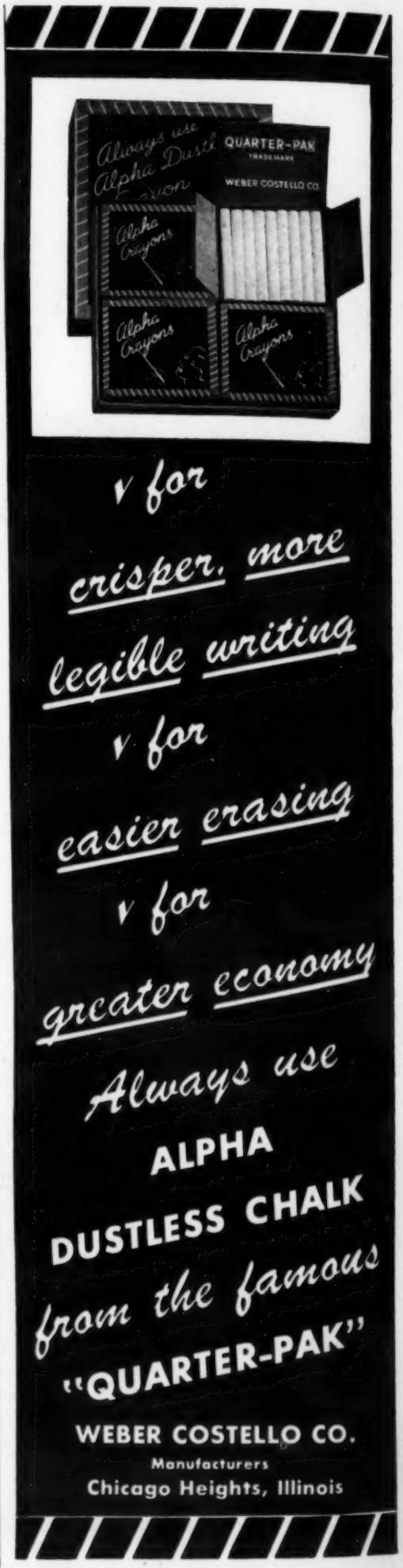
The United States Treasury Department, in consultation with the Office of Education, has prepared materials on school savings for use in teaching thrift in elementary and high schools. During 1946, the plan provides instructional materials intended to carry over into peacetime conditions the wartime motivation for learning the budgeting and use of income and the development of habits of economy and thrift. Copies of the materials are available from the Education Director, U. S. Savings Bond Division, The Treasury Department, Washington, D. C.

SCHOOL LUNCH FUND VOTED

On February 21 the House of Representatives voted to make the federal aid school lunch program permanent, but specified that Negro and white children shall benefit alike from the $50,000,000 annual federal subsidy.

The House bill was stripped of a proviso to authorize the United States Office of Education to spend $15,000,000 additionally per year to supervise the lunch program, and to help plan children's diets.

The bill provides for dollar-for-dollar state participation, with accelerated state payments up to 80 per cent of the lunch costs by 1950.



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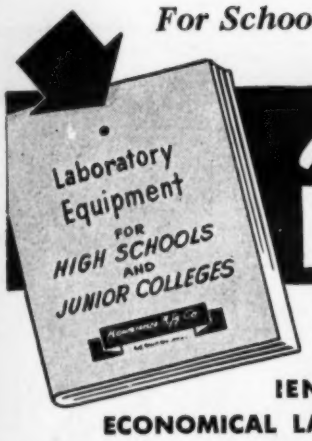

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THE BRUCE PUBLISHING COMPANY, 803 Montgomery Bldg., Milwaukee 1, Wisconsin

ADULT EDUCATION

(Concluded from page 23)

women. There are many adults who would attend classes in the daytime and who are barred from full participation in the opportunities offered by adult education when there is only an evening schedule. This will be remedied when more room is made available to hold classes during the daylight hours and when adult centers will provide nurseries for the children of mothers who desire to attend adult classes.

Thus the aims of adult education will expand to "provide the means through which finer types of human beings will emerge, the kind of men and women who are experiencing what it really means to live, and who will not tolerate social situations that prevent their fellow beings from doing likewise."[7]

In the future adult education will see to it that the ordinary environment of life is as educative for the adult as the nursery school is for the two-year-old. As the late John H. Finley stated once, "I look forward to the day when we will have a system of adult education that will reach every man and woman, just as we are now making an effort to reach every child."

Dr. Finley's dream will come true before many years have passed, for educational leaders throughout the country are recognizing that adult education must be one of the major functions of the schools in the future.

[7]Hewitt and Mather, *Adult Education: Dynamic for Democracy*, p. 19.

THE SCHOOL LIBRARY AND THE PRINCIPAL

(Concluded from page 27)

signed to it at least one weekly period of an hour per week for library work. This period is used under the supervision of the librarian for readings assigned by teachers, instruction by the librarian in how to find books and materials, and occasionally for free reading of books and magazines.

The ninth-grade pupils come to the library from study halls or are sent in from classes. These pupils call for much of the librarian's time.

If the librarian is to effectively perform these duties and have time to know the books and materials in the library, to get acquainted with pupils in order that she may better know what new books to select, to consult with subject teachers, she should have a full-time trained assistant to attend to the routine library work — such as making out catalog cards, arranging bookshelves, keeping records, and keeping the library in order. Also she should have one free period per day to use as she sees fit. I know of one large high school whose librarian comes on duty at 8:45 and remains till 4:30 or later. She has no regular assistant, and just thirty minutes for lunch with ground duty attached. Why ride a good horse to death?

These few, brief reminders have been given with the hope that principals will again check themselves on attitudes toward and assistance to the different departments of the schools and to the library in particular. As the principal, so the school. As the principal, so the library. How blessed are the pupils of a school which has a well-equipped library — a trained, sympathetic librarian — and a principal who realizes the true importance of library work, and does his utmost to make it available to everyone in his school.

SCHOOL BUS FLEET

(Concluded from page 44)

on a per-pupil per-mile cost. The formula $135 + $20 per seat + $20 per daily mile gives more accurate results when applied to a group of buses or to buses ranging above 21-passenger capacity size, and for the smaller size buses may produce too large a result and for the very large buses may produce too small a result, when computed on individual buses. However, for a bus fleet composed of buses of various sizes or middle-size buses, the formula apparently produces, as is seen by the average for 58 buses, a suitable result of value for quickly predicting the possible cost of operation.

Time spent in laying out routes, planning the bus fleet so as to adequately service the district, determining probable cost of operation, and arranging payments, will save many uncertainties in operating procedures. The school district which plans its program ahead and carefully analyzes its costs, will save many worries in transportation operations.

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HOME ECONOMICS EXHIBIT

H. E. Pinkstaff[1]

Since the high school courses in home economics, industrial arts, and art are not part of the compulsory education program of the Anna, Ill., city school system, an effort is made to acquaint patrons with the value of having pupils enroll in these classes. Thus, it has become customary during the month of April for these departments to display articles which have been completed by the students. Before 1945, the yearly exhibit materials were piled in "country fair" style, on long benches, and much of the beauty and significance of the work was lost. The more the writer thought of this exhibit, the more he was convinced that the school staff was failing in doing the best job possible of selling the schools to the parents and patrons who really own them. It decided to modernize the exhibit.

Letters of inquiry concerning exhibits were sent to schools in communities surrounding Anna, and very helpful replies came from home-economics teachers who passed on the ideas used successfully in their schools. Miss Gladys Babcock and members of the home-economics methods class at the Southern Illinois Normal University, Carbondale, were especially helpful.

The Exhibit Organization

Each student in the home-economics classes served on an exhibit committee. These committees included foods, reception, pages, serving, invitations, cleanup, decorations, and purchasing. The exhibit was held two nights, from 7 to 9, but each girl was permitted to serve only one night. The work of the committees was so adjusted that each group could act on its own initiative and each member could use her acquired knowledge in dressing for the occasion, in meeting and introducing guests, in setting the tables, in flower arrangement, in working out color harmonies for the exhibit tables, in planning the refreshments, etc.

In many instances, the exhibit was the first time a girl had had the opportunity of assuming the role of hostess to any public group.

Printed invitations were sent to more than 400 families and the town newspapers carried the invitation. The replies were used by the committee in estimating the amounts of food to be purchased for the refreshments to be offered the guests of the school. The hostesses attired in dresses made in the home-economics classes, met patrons at the doors of the gymnasium, and after greetings and introductions, led them to the "pages" who conducted the guests through the exhibits and explained the several displays. At the end of the tour the guests were served punch and cookies at the snack bar.

What Was Shown

The art exhibit included charcoal sketches, crayon etchings, water color designs, stencils, carvocasts models, and spatter work produced in the art classes.

In the industrial-arts exhibit were chairs, magazine racks, tools, whatnots, tables, picture frames, chairs, bookcases, and many smaller articles.

The key idea in the home-economics section was to display all articles in their usual "home" setting. Thus, the flower arrangements were placed on tables; there were typical dinner and luncheon and breakfast-table sets, all complete with china and silver, place cards, and flowers or other ornaments. Several dressing tables showed embroidery sets and toilet utensils.

The stage was arranged as a living room, fitted with furniture from the industrial-arts department. The walls were brightened with pictures from the art department. The table was draped with a school-made tablecloth and held an appropriate flower arrangement.

At the front of the gymnasium was an electric motor, which the boys had made, and also four rowboats. A group of boys operated a "blinker" system.

At the other end of the gymnasium was the clothing exhibit, which consisted of blouses, dickeys, sweaters, pajamas, skirts, slips, jumpers, pinafores, and dresses — all made by the seventh- and eighth-grade girls. A circular clothes rack displayed 52 aprons, made by the sixth-grade girls.

Community Appreciation

Parents were prone to continue to think of home-economics instruction as cooking and plain sewing, even though they hear from their daughters that the courses include many other important activities. Our exhibit gave evidence that this mistaken notion can be replaced by genuine appreciation of the broad scope of our work which is effective in developing good taste, social competence, ability to budget and to plan meals and clothing, and to acquire other knowledge and skills which together will make for happier, healthier, more beautiful home life. Incidentally, our exhibit has made the community appreciative of the responsible teaching staff. The fact that 75 per cent of our enrollment of 200 is engaged in home-economics or industrial-arts activities is evidence of the acceptance of the work.

[1]Superintendent of Schools, Anna, Ill.

► Hinsdale, Mass. The 1946 budget of the school board includes a provision for 10 per cent salary increases for all teachers.

New Supplies and Equipment

Production, Service, and Sales News for School Buyers

PASTE NOW PACKED IN STEEL DRUMS

Wyandotte 97 Paste — a cleaner for use on bathroom and washroom fixtures, floors and walls — may now be had in steel drums. A handy steel dispenser of the paste is also available.

Wyandotte 97 Paste is a quick acting and free rinsing cleaner, for "spot" cleaning soiled painted furniture, for removing marks from floors of all kinds, and for use by mechanics where hands become heavily soiled. It is easy to

New Containers for Wyandotte Cleaner.

get Wyandotte 97 Paste out of either the small dispenser or the large drum. As a protection the interior of the drum is enameled and the interior of the dispenser is varnished. Both dispenser and drum are equipped with lock tops which assure the user all of the quality put into 97 Paste in its manufacture.

Wyandotte Chemicals Corp., Wyandotte, Mich.

For brief reference use ASBJ—301.

AMPRO IN CANADA

Ampro Corporation has announced the formation of Telephoto Industries Limited, 1195 Bay Street, Toronto, to handle distribution and servicing of Ampro 16mm. motion picture equipment and accessories in Canada and Newfoundland.

Telephoto Industries Limited, which is wholly Canadian, will be the exclusive Canadian distributors of Ampro motion picture equipment and special facilities for institutional, educational, commercial, and other nontheatrical users of 16mm. films.

Ampro Corporation, 2835 North Western Ave., Chicago 18, Ill.

For brief reference use ASBJ—302.

AUDIO VIDEO INSTITUTE

John W. Gunstream has become director of the newly organized Audio Video Institute. The new organization, whose home office will be located in Dallas, is designed to serve schools in the field of sound and visual education.

The Institute has been appointed educational dealer for RCA Victor in the Texas, Oklahoma, and New Mexico territory. In co-operation with RCA Victor, the Institute will provide facilities for sound and visual education, including equipment and professional services in planning and utilizing scientific aids to learning in education and industrial training. Offices are located in Dallas, Houston, San Antonio, Lubbock, Albuquerque, and Oklahoma City.

Radio Corp. of America, R. C. A. Victor Div., Camden, N. J.

For brief reference use ASBJ—303.

FILMS FOR PURCHASE AND LONG TERM LEASE

For the first time are offered dealers and film libraries the opportunity to obtain ITTCO pictures on an outright purchase or long term lease basis. This plan permits the purchaser to carry ITTCO major films on a depository basis at no cost and with no advance of funds. It also enables the dealer to purchase films for his own permanent library on a deferred payment plan. Features, shorts, and serials in the entertainment, educational and religious fields are being offered. Likewise, on a depository basis, other independent releases which are the product of major companies, but which do not require location approval, will be offered.

International Theatrical & Television Corp., 25 West 45th Street, New York 19, N. Y.

For brief reference use ASBJ—304.

FILMO DIPLOMAT RETURNS

Distribution of postwar movie equipment is progressing smoothly. One of the first items to appear is the Filmo Diplomat, 16mm. silent motion picture projector. Designed for the home movie maker, the Diplomat possesses exclusive features claimed to add a professional quality to home movie projection. A new cooling system permits the use of a 1000-watt lamp, in addition to the standard 500- and 750-watt lamps. The 1000-watt lamp is primarily intended for showing movies in halls, clubs, etc. All lamps are prealigned and prefocused to obtain maximum efficiency. Every moving part is gear driven, even to the feed and take-up spindles. There are no chains or belts. Gears are fully encased and silent. The Diplomat is constructed to show not only silent film, but sound film as well.

Bell & Howell Co., 7100 McCormick Road, Chicago 45, Ill.

For brief reference use ASBJ—305.

MESSRS. DERRY, NELSON, AND MONROE ELECTED

At the twenty-ninth Annual Meeting of the National Association of Fan Manufacturers held at Hot Springs, Va., January 24–25, 1946, the following officers were elected for the ensuing year, G. C. Derry, president; R. H. Nelson, vice-president; and L. O. Monroe, secretary-treasurer. Mr. Derry is vice-president and general manager of the B. E. Sturtevant Company, Boston, Mass., and Mr. Nelson is president of the Herman Nelson Corp., Moline, Ill. A new publication, "Standards, Definitions, and Terms in Use by the Fan and Blower Industry," may be had on application to

National Association of Fan Mfgs., 5–208 General Motors Bldg., Detroit 2, Mich.

For brief reference use ASBJ—306.

FILM VOCABULARY

The growing use of classroom films is bringing a new vocabulary into the schools. Words like "blooping," "gate," "sync" and "unsync," are not jitterbug terms but part of the new language employed in using classroom films. So that teachers may become familiar with the necessary terms, Encyclopaedia Britannica Films offers a film lexicon. Now, if a student says "The gate is rusty," he does not mean, as one would expect from the radio, that a "jive cat cuts an awkward rug." The "gate" is the hinged retainer plate on the film projector which holds the film firmly against the aperture to the lens. If it is rusty, obviously it needs cleaning. Or, if a student suggests that the teacher "bloop the film," he means nothing more incomprehensible than that the portion of the film which has been spliced must be lacquered to eliminate the queer whistling sound, known as a "bloop." Similarly, "sync" and "unsync" are terms to indicate whether the sound is synchronized, or not, with the lip movements of the actors in the film.

The Encyclopaedia Britannica, 20 North Wacker Drive, Chicago 6, Ill.

For brief reference use ASBJ—307.

SAFETY BEGINS AT HOME

Young America Films, Inc., has issued a single reel, 360 ft., 16mm. sound film, for the purpose of promoting safety in the home. The film which dramatizes the fun of safe living, expresses home safety principles, and calls attention to safety hazards in the home, how they can be recognized and avoided. An interpretive teacher's guide is included.

Young America Films, Inc., 18 East 41st St., New York 17, N. Y.

For brief reference use ASBJ—308.

STORAGE AND AUTOMATIC DISPENSING OF CHINA, GLASSES, TRAYS

An automatic device that speeds food handling by combining storage with automatic dispensing is being manufactured, under the trade name of AMF *Lowerator* dispensers. The units operate by means of a simple, calibrated spring action which is made to dispense cups, saucers, dishes, glasses, trays, bowls, etc., at convenient counter level. China, simply and easily loaded from the top, depresses the calibrated spring in direct ratio to the weight placed on it. As each piece is removed, another one automatically moves up to take its place. Fully loaded, half filled, or nearly empty, the dispenser's spring action keeps the top piece of china at the same convenient level.

The AMF *Lowerator* acts as a storage unit and automatically dispenses five to seven dozen plates, 150 to 200 trays or 100 to 150 glasses or cups. Since these items are lowered into the *under*-counter space that is so often wasted, counters are free for food display; supplies are always on hand. Dishes are always within easy reach of counterman or customer. The great savings possible by reduced china or glassware breakage is a special feature of these units. Dishes are secure at all times from slipping or pushing and are protected from personal contact.

American Machine & Foundry Co., 511 Fifth Ave., New York 17, N. Y.

For brief reference use ASBJ—309.

MUSICAL SOUND MOTION PICTURE

A front row studio seat at a musical broadcast is provided by the black and white educational sound motion picture, "Music in the Sky," which schools may borrow free, except for transportation cost, from the School Service Department of Westinghouse Electric Corp. Available in 16mm. or 35mm., the film is recommended for general assembly groups, English classes studying radio, music classes, and general science classes. The film features the Sunday musical radio show starring John Charles Thomas, John Nesbitt, Ken Darby and chorus, and Victor Young and the sixty-piece orchestra. The motion picture gives a brief insight into the technical preparations necessary to broadcast a nationwide program. Requests for the picture must be sent one month in advance of showing date.

Westinghouse Electric Corp., School Service, 306 Fourth Ave., Box 1017, Pittsburgh 30, Pa.

For brief reference use ASBJ—310.

PERSONAL NEWS

S. P. FLENNIKEN, JR.

The appointment of S. P. Flenniken, Jr., as manager of the office equipment sales for the Berger Mfg. Division, Republic Steel Corp., Canton, Ohio, has been announced. Mr. Flenniken is a graduate of Pennsylvania State College and returns to Berger after serving as a lieutenant in the naval reserve. In his new connection Mr. Flenniken will handle the sales of filing equipment, storage cabinets, transfer cases, bookshelf units, and desks.

MESSRS. KANE, TAYLOR, AND HODGES

The Herman Nelson Corporation is happy to announce the return to its staff of Lt. Coleman Kane, Midshipman Russell Taylor, and Captain

James Hodges. These veterans join the firm as product application engineers and will be affiliated with the firm's New York, Chicago, and Moline offices respectively. After several weeks of re-orientation at the home office and factories in Moline, Ill., they have returned to their branch office assignments.

PROMOTIONS IN EDUCATIONAL DEPARTMENT OF WESTINGHOUSE

Appointments of a manager and two supervisors in the field of student training have been announced by the educational department of the Westinghouse Electric Corporation, East Pittsburgh, Pa. The men promoted were Henry N. Muller, Jr., who becomes manager of graduate student training; Maynard J. Warneke, supervisor of training, and Albert J. Murphy, Jr., supervisor of student activities.

A native Pittsburgher, Mr. Muller attended St. John's Military Academy at Delafield, Wis., then Dartmouth College from which he received his bachelor of arts degree in physics in 1935.

As supervisor of training, Mr. Warneke is responsible for the functioning of basic training programs for graduate students and will supervise their efforts after assignment to different departments in the Company. Born in Denver, Colo., he attended South Denver High School and was graduated from the University of Colorado, at Boulder, with a bachelor of science degree in mechanical engineering in 1940.

Mr. Murphy, as supervisor of student activities, will serve as dean of men to graduate students, with responsibility for student orientation, aptitude, and interest testing. A native of Sewickley, Mr. Murphy was graduated from the high school there, and from Pennsylvania State College with a degree of bachelor of arts in 1938.

PROMOTIONS ANNOUNCED

International Business Machines Corporation has announced the promotion of Thomas J. Watson, Jr., to the position of assistant to the executive vice-president, with headquarters in New York. He recently returned from five years of service with the U. S. Army Air Forces.

Also announced are the promotions of James W. Birkenstock to the position of general sales manager of the company, with headquarters in New York. He was previously a special sales executive at the World Headquarters in this city.

Gordon P. Lovell, formerly manager of electric accounting machine sales in Dayton, Ohio, has been appointed to sales executive in the New York office.

4-H SCHOLARSHIPS

In a plan to increase the emphasis on visual education, along with a desire to encourage youth betterment, the Victor Animatograph Corporation of Davenport, Iowa, manufacturer of 16mm. sound motion picture equipment, has provided funds for two 4-H Club scholarships in visual education to the National Committee on Boys and Girls Club Work. This is the first time such scholarships have been made available to 4-H Club members. Contestants for the scholarships were required to show evidence of interest and experience in the operation of motion picture projection equipment, use of cameras, slide films, slides, and other visual aids. According to the rules, the winners must include, as a minimum, at least one course in visual education.

ISSUE SERVICE BULLETIN FOR TEACHERS

D. C. Heath & Company, Boston, Mass., have just issued the first number of *The Packet*, a service bulletin for elementary teachers.

The present issue forecasts the type of materials to be published — articles by authors of distinction, of practical value to every person concerned with advancing elementary education. This issue contains helpful articles on reading, in addition to news notes from the field, and helpful suggestions to teachers in the classrooms.

The Packet is available, free of charge, to elementary school teachers who will send in a request that their names be placed on the mailing list.

Guide to Products and Services

Advertisers in this index are given a code number in addition to the page number on which the advertisement appears. Refer to the advertisement for product or services available. Write direct to advertiser or use the coupon in requesting information from a number of advertisers.

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